

JPRS 76619

15 October 1980

China Report

AGRICULTURE

No. 105



FOREIGN BROADCAST INFORMATION SERVICE

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I. GENERAL INFORMATION

RESISTANCE APPEARS IN CHINA TO RETURN TO FAMILY-RUN FARMS

Paris LE MONDE in French 6 Sep 80 p 4

[Article by our correspondent Alain Jacob: "Resistance Appears To Return to Certain Forms of Family Farming"]

[Text] (Beijing)- Just as the Chinese deputies are informed of vast plans of economic reform, surprisingly different opinions are expressed on the desirable ways to conduct rural policy. At the heart of the debate is the question whether the organization of people's communes, divided into brigades and teams, must be maintained at least in its main lines, or whether a return of less "socialized" and more "private" forms of cultivation is preferable.

The discussions, begun nearly 2 years ago, took on a rather lively twist in the spring of 1979 with letters in the press denouncing either the dismantling of collective farming, or persistent "leftwing" tendencies--that is anti-reform ones--among rural officials.

In October 1979, two documents issued by the Central Committee were supposed to clear things up. They indicated, in short, that it was permitted to divide production teams into "work groups," but on the condition that the team retains control over bookkeeping and wages of the peasants, and thus remains the "basic unit" of the rural system. The texts made it clear that, excepting very special cases (particularly in mountainous and scarcely populated regions), it was not permitted on the one hand to distribute land to individual farmers, and on the other, to set up units answerable for their profit and loss on the basis of a family group.

Obviously, these texts represented only a compromise at the time, and evolution over almost a year has largely transgressed these limitations. A formula that has gained increasing acceptance consists in giving family groups "responsibility for a production," for rice transplanting for example, thus relegating the team to a mere formal role. Around that system all kinds of variations can shape up, concerning especially land distribution, utilization of draft animals, farm tools, mechanized equipment, or irrigation pumps, etc. But the trend is clear: a return of methods extolled in the early sixties by Liu Shaoqi in the wake of deceptions arising from hasty and systematic generalization of people's communes.

Well, this orientation is formally contested in several provinces. The most glaring disapproval was formulated in July by Wang Enmao, Jilin party first secretary, who condemned the allotment of "production quotas" to family groups, adding that progress can only be achieved in the interest of productivity and well being of all through "consolidation and development of collective economy," and not by allowing "everyone to work for himself."

Wang Enmao is not the only official to have issued that kind of warning. On 10 August, Li Erzhong, provincial governor of Hebei, recalled that it is out of the question for anyone to "affect the collective ownership of means of production," and condemned "certain production teams for distributing farm land, animals, and equipment to open or disguised individual farms." He added, "It goes without saying that while criticizing the leftist line we must keep out of rightist phenomena as well."

Similar warnings have appeared in Guizhou, Hubei, etc. This kind of reaction was prompted in part by technical reasons. Fragmentation of production units has given rise to unbearable difficulties in the use of equipment--rare after all--which could not be divided. There were even cases in which, amid a drought, irrigation systems could not be fed by collective electric pumps. In a more general way, there is the understanding that modernization of agriculture is hardly compatible with a return of traditional farming structures. Less than 100 km from Beijing, it is usual to see harrows or ploughs drawn by women--a sign of fundamental poverty that rules out mechanization, unless through collectivization. But, independently of the questions that can be asked on the amelioration of living conditions of peasants of both sexes, such mechanization is indispensable if one wants to considerably increase seasonal agricultural output; otherwise deep ploughing and rational use of chemical fertilizer can hardly be possible. Not to speak of the weight of traditions which, in small family units, often resist the introduction of techniques as elementary as periodical crop rotation.

Political Debate

There are reasons to think, however, that the debate is political as well. First of all, because the central press continues to criticize leftist wrongdoings with much more severity than it does rightist errors. On 27 August, the QUOTIDIEN DU PEUPLE even carried a short article, showing how much "foot dragging" a brigade in Jilin, precisely Wang Enmao's province, has been able to cause with its refusal to toe the family farming line. Inversely, it is known that the Jilin party first secretary--a former military man--is not in disagreement with present trends now calling the shots in Beijing on the only problem of rural farming. Going against the grain of what has been said for the past two years elsewhere, he affirmed in July that it was necessary to continue sending educated youths to work in the rural areas, since, he said, "one of the goals of communism is to bridge city-country side gaps." These statements are inspired by the best authors, but not by those who are now publicly listened to in Chinese leading circles.

Such discrepancies caused one to mull over the solidity of the present orientations and the resistance facing them. In many places, for instance in the south of Hubei, local officials have been incapable of telling the people whether farming systems accepted this year would still be tolerated next year.

PRC ECONOMIC JOURNAL ON POLICY IMPROVES AGRICULTURAL PRODUCTION

HK020705 Beijing JINGJI GUANLI in Chinese No 8 15 Aug 80 pp 3-5

[Article by Zhou Chuan [0719 1557]: "Judging the Power of Policies From the Increase of our Agricultural Production"]

[Text] The year 1979 was the first year of China's policy of the readjustment, restructuring, consolidation and improvement of the national economy. Since then, we have made remarkable achievements in agriculture. Their manifestations are mainly the following: first, production increase by a large margin. The agricultural gross output value including farming, forestry, animal husbandry, sideline production and fishery registered an increase of 8.6 percent in 1979 above the 1978 increase of 8.9 percent. The annual average growth of grain production in the past 2 years was more than 40 billion jin, a rise of over 8 percent. Such a large and successive increase in agricultural production has been unparalleled since the founding of new China. Second, the standard of living of the peasants is greatly improved. With the development of agricultural production, the average annual per capita of grain which the peasants gained from collective production rose to 7 percent and that of income increased to over 13 percent. The system of more pay for more work has brought about a better life and ease of mind to millions upon millions of peasants. In the vast countryside, there is a booming scene hardly seen in the past years.

Why has the pace of agricultural production been so fast and the changes in the rural areas so remarkable in the past 2 years? People said, "It is the result of the fine policies which won the hearts of the masses." Facts confirm this. Various localities earnestly carried out the two documents of the party Central Committee on developing agricultural production, implemented the related policies accurately and thus was able to demonstrate the tremendous strength of party policies by accelerating the expansion of agricultural production.

Stabilize Ownership

It is an objective law independent of man's will that the relations of production should conform to the development of productive forces. If we

act upon that law, production will develop; otherwise it will suffer setbacks. This has been proven by historical experience. The system of three-level ownership with the production team as the basic accounting unit for rural people's communes enacted in the 1950's is in conformity with the level of development of agricultural productive forces of our country at the present stage. However, in a certain period in the past, the 10 years of chaos in particular, by pursuing the ultraleftist line, in quite a few places Lin Biao and the gang of four did as they pleased to change the relations of production and stirred up the evil wind of "premature transition." This has dampened seriously the enthusiasm of the masses and brought great damage to the development of productive forces. Some localities blindly enlarged communes and merged production teams into production brigades. Once the production teams were amalgamated into production brigades, they slaughtered pigs and sheep, fell trees and distributed reserved grain. As a result, the more the production teams were merged, the poorer they became. After the downfall of the gang of four, especially since the party Central Committee issued its two documents on problems concerning the development of agriculture, many localities have redressed the wrongdoings which had sabotaged production, and stipulated in clear terms that the production brigades which had been interrupted and taken as basic accounting units in a premature or arbitrary way should be restored to their former state--that is keeping the production teams as the basic accounting units. Thus the system of three-level ownership with the production teams as the basic accounting units was restored and stabilized. Since then, the vast numbers of commune members have been able to concentrate their attention to promoting production. Last year, in Tunliu County of Shanxi Province, some 140 production brigades which had been turned to be basic accounting units in a premature way restored the status quo ante. All this has greatly fired the enthusiasm of vast numbers of peasants for production, triggering a faster growth in agricultural production.

Grant the Production Teams Greater Power of Self-Management

Granting the production teams greater power of self-management is a fundamental measure to giving full play to the enthusiasm of the production teams and enlivening the rural economy. In the past, many localities used to issue arbitrary orders and exercised rigid control over the production teams by only permitting them to concentrate on one aspect of farming; that is, they were only allowed to go in for grain production, but not for a diversified economy, thus seriously weakening the decisionmaking power of the production teams. It was alleged that once grain production failed to fulfill the output target, the party secretaries would run into trouble. So long as grain production met the target, the rest of crops could be ignored. Though "ignoring the big picture" was somewhat exaggerated, some crops which were suited to local conditions were not planted. Therefore, the ways for expanding production became narrower and production forces were gradually given more power of self-management in production, management and operation as well as distribution. Proceeding from local reality, if conditions permit, the production teams may go in for farming, forestry,

animal husbandry, sideline production or fishery. They may also explore and open more avenues for production in order to develop farming, forestry, animal husbandry, sideline production or fishery in an all-round way. Take Jiangsu Province for example. The province restructured its rural economic structure, changed the unitary agricultural economy and took the road of comprehensive development of farming, sidelines production and industry, thus achieving marked results. The proportion of output value of industries and sideline production run by the communes, production brigades and teams in 1979 occupied 56 percent of the gross output value of the province's farming, sideline production and industries, while in 1976 it accounted for only 38 percent.

Establish a Sound System of Responsibility for Production

For many years, owing to the influence of the ultraleftist line, some localities criticized and repudiated the system of "to each according to his work" as capitalism. Consequently, people paid no attention to the results in production and ignored production quota and work efficiency, thus dampening the enthusiasm of the vast numbers of peasants for production. There was a saying, "people share food from the same big pot regardless of the fact whether they do a good job or a shoddy one. While going to work, they swarm towards it; while working, they loaf on the job all day long." In the past 2 years, by readjusting their business management, many localities established and perfected various types of responsibility systems in production. These systems which embody the principle "to each according to his work and more pay for more work" can bring into play the initiative of the vast numbers of commune members for production which result in higher pay for higher production and this benefits both the state and the individual. Take Sichuan Province for example. It widely exercised the practice of assuming responsibility for production with a fixed quota given to production groups. The fundamental advantage of this system is that the material interests of the collective and the individual are combined closely and that everyone is concerned with production output and pays close attention to the quality of farm work which is an impetus for promoting the development of production at high efficiency. The people's communes in Xindu County of Sichuan Province which carried out the above-mentioned system of responsibility for production have achieved remarkable results in increasing collective grain production and income for the commune members. Last year, the average per capita of grain for the peasants gained from collective production was 577 jin, 8.3 percent higher than the previous year and the average per capita of the peasants' net income was 124 yuan, corresponding to a 30.5 percent rise. Take Fengyang County in Anhui Province as another example. It was once a famine-ridden place where the yield had been low for years due to its oversimplified business management. Last year, they emancipated their minds, readjusted the business management so that it suited their local conditions and instituted the responsibility system that the production groups were solely responsible for production. This system was warmly welcome by the vast numbers of commune members. As a result, the grain output

in the county registered an increase of 50 percent last year. The grain sold to the state was equal to the total volume in the past 20 years. The standard of living of the commune members has greatly improved.

Encourage the Commune Member To Develop Sideline Production

Another manifestation of the ultraleftist line pursued in the countryside by Lin Biao and the gang of four was "to cut off the capitalist tails." In many places, the commune members were not allowed to engage in sideline production, their small plots of land for personal needs were taken away and the rural trade fairs banned. Under such circumstances, the hen flew away and the eggs in the coop were broken--all was lost. Complaints were heard everywhere. In the recent years, since last year in particular, in light of the "60-article regulations" on rural people's communes, various localities have implemented related policies, encouraged and supported the peasants to do a better job of sideline production. In so doing, the ways for the commune members to increase their personal income were expanded. The rural economy was enlivened and business in market towns was brisk. According to statistics, last year the volume of pigs purchased by the state attained an increase of 21.55 million pigs over the previous year, a growth rate of 20 percent; while that of eggs purchased by the state was 0.55 billion jin, a 50 percent increase. Due to the development of the collective economy and sidelines production, many commune members have the "three mores," that is, earning more personal income, having more bank savings and building more houses. People said elatedly, "If you want to be rich, raise more pigs, poultry and rabbits."

Increase the Purchasing Prices for Agricultural and Sideline Products by a Large Margin

In order to consolidate the worker-peasant alliance and help improve the life of the peasants, the state has put a considerably large sum of money in readjusting the purchasing prices of agricultural and sideline products. Last year the expenditures for increasing the purchasing prices, prices for surplus above purchase quota and negotiated prices for the major agricultural and sideline products were over 10 billion yuan. So large was the margin of price readjustment that it set a precedent in the history of new China. Owing to the rise of purchasing prices for agricultural and sideline products, according to statistics, the total amount of the state's expenditures on this respect corresponded to providing about 13 yuan in subsidy for each peasant throughout the country. This has played a great role in arousing the enthusiasm of the peasants and expanding agricultural production.

The above-mentioned facts show that once various rural policies are put into effect, the initiative of vast numbers of peasants can be brought into play, the development of productive forces promoted and the better economic results achieved. However, we must see to it that in the matter of policy, there are still many potentialities to be tapped. The main obstacle for

expanding agricultural production remains the pernicious influence of the ultraleftist line pursued for a fairly long period by Lin Biao and the gang of four, which has not been eliminated thoroughly and at present still fetters the people's minds in various degrees. Therefore, in the coming few years, the key link to increasing agricultural production is to rely on giving full scope to the power of the party's policies. Only when we re-adjust the weak links which are not suited to the relations of production, further implement various economic policies in the rural areas and do a lot of hard work in a down-to-earth manner, can our farming, forestry, animal husbandry, sideline production and fishery develop in an all-round way and the rural economic situation get better and become more favorable.

CSO: 4007

MEASURES ADOPTED TO ENRICH OLD REVOLUTIONARY BASES

Development in Jiangxi

Beijing KENMIN RIBAO in Chinese 28 Jul 80 p 2

[Article: "Flexible Policies To Transform Poverty Stricken Appearance of Old Revolutionary Bases in Jiangxi"]

[Text] The Jiangxi Provincial CCP Committee recently decided to institute special policies for some economically backward and hard pressed counties in old revolutionary base areas so that the people in these areas can rest and recuperate, develop production, and gradually change their economically backward appearance within 3 to 5 years.

Recently the Jiangxi Provincial CCP Committee convened a Province-wide Old Revolutionary Bases Construction Work Conference, which summarized the lessons of experience in the construction of old areas and acknowledged a need to correct programs and policies for development of the old areas in a realistic and factual way. Financial and material support from the state for the old areas is necessary, but essentially it is necessary to take the realities of the old areas as they exist and implement some special flexible policies that allow the people in the old areas to develop production through their own efforts to bring about rapid change in the areas' poverty stricken appearance. Consequently the Provincial CCP Committee decided to make target counties of some economically backward mountain regions in the old areas of southern Jiangxi and Jinggangshan, designating them special economically distressed areas and adopting the following measures for these regions.

1. Exemption from state procurement grain quotas of every production team in which average grain allotments per person are less than 450 jin, making up the amount thus lost through purchases of excess in other places and through negotiated grain purchases. Following exemption from state grain procurement quotas, procurement and marketing work contracts for grain in these counties will be instituted with the guarantee that they will not be changed for 5 years.

2. Institution of a system of awards of grain to supplement the basic grain allowance in order to solve the food grain problem. The basic amount of food grain supplied the people of these areas should equal the levels of nearby production teams.

3. Liberalization of forestry industry policies. Rights to mountain forests must be settled. There should be a policy whereby collectively owned barren mountains that are forested by communes become the property of those communes; those forested by brigades become the property of the brigades; those jointly forested become common property; and those forested by individuals become individual property.

4. The system has to be relaxed somewhat, and methods have to be somewhat more flexible. In places in remote mountain regions where there are single families and households, where production is antiquated and life difficult, and where collective economies are not well developed, contracting for production with households and with individuals should be permitted in the management of production.

5. Full respect for the autonomy of production teams, specialized teams, operating teams and individual commune members. Production plans and planting arrangements are to be decided by the teams themselves with an adaptation of methods to suit circumstances, each deciding what they will plant and what animals they will raise.

6. Readjustment of various policies bearing on development of the economies of mountain areas. Priority treatment should be accorded to special economically distressed areas in low interest bank loans, aid funds for poor communes and poor brigades, and in the supply of the means of production and the means of livelihood. The tax revenues and commissions charged for various native products from these areas should be reduced or exempted where appropriate. Agricultural, forestry, cattle raising, sideline occupation, or fishery products brought to market for sale or exchange by communes and brigades or individual commune members should be exempt from taxation for a period of from 3 to 5 years. Motor vehicles and tractors provided for use in the forestry and cattle raising industries in mountain regions should be exempted from payment of road maintenance fees. When labor is needed for future state construction projects, these areas should not have to contribute laborers. Instead a contract system may be used with communes and brigades taking responsibility and earning income in the same way as from sideline occupations.

Nei Monggol Bases

Beijing RENMIN RIBAO in Chinese 28 Jul 80 p 2

[Article: "Liberalization of Policies in Old Revolutionary Base Areas in Nei Monggol"]

[Text] The Nei Monggol Autonomous Region People's Government recently decided on further relaxation of policies pertaining to mountain region old revolutionary bases to allow these places to become prosperous in the shortest possible time.

The old revolutionary bases in mountainous regions of the Nei Monggol Autonomous Region touch on more than 400 people's communes in 50 banners and counties, accounting for more than 40 percent of the total area and more than 3.2 million population. Production in these regions has developed slowly, and the people's lives are quite hard.

The autonomous Region People's Government recently convened a Mountain Region Old Revolutionary Bases Construction Work Conference. The conference acknowledged the need to change the face of these areas and that in addition to utmost state aid in support of every aspect of the task, some liberalization in policies was most important at the present time in order to help the masses rest and recuperate and to arouse their enthusiasm to the full. On the basis of an analysis of present circumstances in the old revolutionary bases in the mountains, the conference made concrete formulations for the liberalization of policies about cattle that may be kept by farmers and herdsmen who raise them, encouragement and support to commune members to plant trees to create forests and to grow grass, proposed enclosure of pasture lands for herds in pastoral regions, a lightening of burdens on communes and brigades in these areas, and the form of a system of responsibility for production in these areas.

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CSO: 4007

INCREASED USE OF ELECTRICAL IRRIGATION MACHINERY NOTED

Beijing RENMIN RIBAO in Chinese 28 Jul 80 p 2

[Text] According to the Ministry of Water Conservancy, China's electrical irrigation machinery has developed very rapidly, and basically the three water wheels (the manual, wind, and pipe pumps) of the early stage of the liberation have now been replaced. The existing electrical irrigation machinery in the country is close to 70 million horsepower, a 700-fold increase compared with the early stage of the liberation, and is operating on more than half of the total irrigated acreage and draining more than one-fourth of the waterlogged lands. This pumping equipment has had an important effect on drought and flood resistance and irrigation development, and has promoted agricultural yield increase, agricultural mechanization, and rural electrification. Vast areas of Taihu, Dongtinghu, the Jiangnan Plain, the Pearl River Delta, and the lower reaches of Subeilie are guaranteed a harvest regardless of drought or flood. The appearance of high and stable yield lands is inseparable from the development of electrical irrigation and drainage tools.

In the business management of electrical irrigation and drainage stations, many models of excellence have appeared. Wuxi County of Jiangsu Province has 77,000 horsepower of electrical irrigation and drainage capacity, and all of it is scattered in small stations. The county uses economic measures to manage its electrical irrigation capacity to achieve good maintenance of the equipment and great benefit for irrigation and drainage. The burden on the communes and brigades is light. Last year, the county's irrigation and drainage system carried out diversified operations to net a profit in excess of 1 million yuan. The Jiamakou Electrical Irrigation Station of Linyi County, Shanxi Province, has a machinery capacity of 7,800 kilowatts to pump the water of the Huanghe to irrigate 430,000 mu of fields. Since the station was established in 1960, the water use per mu has been reduced from above 200 m³ to 64.7 m³, and the cost from 5 yuan to 1.1 yuan. At the same time, the grain yield per mu has been increased from 150 plus jin to 300 plus jin. In 1979, the station returned to its superiors a net profit of 76,000 yuan. The irrigation station of Gezhong-Mafang, Sanhe County, Hebei Province, is a station with 670 kilowatts of equipment. The station has only 10 employees. In the 17 years since its establishment, the level

of management improves continuously, and more than 20,000 mu form a region receiving benefit from the station. The yield per mu has been doubled in these years. The station has been self-sufficient continuously for 10 years. The maintenance and repairs have been minor, the workers are provided with grains, vegetables, meat, oil, and firewood, and it now has an accumulation of 110,000 yuan.

Most recently, the Ministry of Water Conservancy called a national electrical irrigation and drainage management conference in Wuxi County, Jiangsu Province. The electrical irrigation and drainage stations of all the areas are told to strengthen scientific management and economic management to enlarge the irrigated acreage, to conserve energy sources, and to develop comprehensive utilization for the purpose of reducing the burden on the farmers.

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CSO: 4007

NEW PEA-WHEAT HYBRID SUCCESS VERIFIED

Beijing GUANGMING RIBAO in Chinese 21 Aug 80 p 1

[Article by correspondents Li Wei [2621 5588], Zhao Xueli [6392 1331 4909], and Zhang Tianlai [1728 1131 0171]: "Wandoumai No 1 Attracts Attention of Geneticists Domestically and Internationally; Zhang Siwen [1728 1835 2429] and Li Zhongxian [2621 1813 1288] Breed a New Hybrid of Peas and Wheat on the Qinghai Plateau"]

[Text] Two technicians who are graduates of a polytechnic school conducted experiments with the distant hybridization of peas with wheat in the high and cold mountain regions at more than 3000 meters above sea level on the Qinghai Plateau to breed a new spring wheat variety, Wandoumai No 1. This feat has attracted the attention of geneticists both domestically and internationally.

In systematic botany, peas are classed as being dicotyledonous while wheat is monocotyledonous, and their genetic relationship is very distant. A foreign academician had already tried unsuccessfully to cross peas with wheat, but the two technicians transferred just this year to the Jiangxi Provincial Agricultural Institute, Zhang Siwen and his wife, Li Zhongxian, were successful in this effort during the period when they formerly worked in Qinghai, thereby demonstrating that peas and wheat can be crossed with each other.

This research task was given them in 1970 by a person in charge at the Qinghai Provincial Science Commission. It had as its goal the breeding of an early maturing new variety of spring wheat with consistent yields suited to high and cold regions. Both domestically and abroad, test sites for the breeding of wheat are at elevations no higher than around 2700 meters, but they selected a test base at an elevation of 3200 meters above sea level at the Xinzhe Farm in the Gonghe Basin where both natural conditions and living conditions are very poor. There is virtually no absolutely frost free period here, and sometimes even highland barley, which has a short growing season, does not reach maturity here. During the first year, they conducted hybridization experiments on a total of 5000 different varieties of domestic and foreign wheat, all of which failed. Later on, under the guidance of the farm workers, they experimented with the hybridization of

peas and wheat, hoping to transfer to the wheat the qualities of early ripening, heavy grain weight, and high protein content of peas. In 2000 combinations, only from a single combination in which a pea was the male parent and wheat the female parent, were three seeds derived. These were as precious as pearls. When they were planted the following year, one seed was eaten by a rat; one seed put forth two leaves and died; and finally remaining was a single plant, which continued to live under their assiduous care, to produce a main spike and two spikelets from which more than 100 seeds were harvested.

Comrade Zhang Siwen brought out several pea-wheat plant specimens to show me. They certainly had the characteristic shape of peas. In addition to the main spike, at each node along the main stem there was a spikelet, which is something that wheat, which belongs to the grass family, does not have. The stalks of wheat are hollow, but at the second and third nodes at the base of some of the pea-wheat, the stalks were solid. A photograph of the chromosomes in pea-wheat shows that though peas have 14 chromosomes and wheat has 42 chromosomes, pea-wheat chromosomes number both 14 and 42 and, in some cases, 28, 38, 40, 41, and 43. When tested with an amino acid automatic analyzer, both pea-wheat and peas were practically devoid of cysteine while the lysine content was double that of wheat.

In order to verify their results, they performed repeated experiments in crossing wheat with peas, always meeting with success. Subsequently, they extracted the DNA genetic material from peas and injected it into wheat and used the seeds obtained as well as the seeds obtained from the direct pollination of peas to conduct isoenzyme analysis to affirm preliminarily the essential nature of the hybridization of the wheat and the peas. It is the result of the pollen grains of the pea flower, which are rich in nutrients, carrying the DNA genetic material to the wheat, thereby causing remarkable genetic mutations in succeeding generations.

The appearance of pea-wheat aroused the attention of numerous scholars in the field of genetics. The YICHUAN XUEBAO [ACTA GENETICA SINICA], ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA], YICHUAN YU YUZHONG [GENETICS AND BREEDING], KEXUE TONGBAO [SCIENCE BULLETIN], and ZIRAN KEXUE ZHENGMING [NATURAL SCIENCES CONTENT] all carried articles providing brief accounts. The International Center for Maize and Wheat Improvement also proposed an exchange of documentary materials and seeds.

This success provided a better variety of wheat to high and cold mountain areas and to areas in general. It ripens earlier by about half a month than ordinary varieties of spring wheat, and it even ripens 1 to 3 days earlier than highland barley, which has a very short growth period. It has made possible the raising of the growth line for spring wheat in the high and cold mountain regions of Qinghai from around 2700 meters above sea level to around 3200 meters, and it avoids the great damage from cold, frost, ice and hailstones caused during the late stage of growth. When grown in other areas, it is also a good variety that is helpful in crop rotation. Pea-wheat is of superior quality and has a protein content as

high as 6.33 percent. (Ordinary wheat has from 12 to 13 percent). Yields are also quite high. Planted at Xining City in Qinghai, yields were more than 900 jin per mu, and individual communes and production brigades brought in yields of 1250 jin. In test plantings at the Taiping Commune in Xichong County, Sichuan Province, yields of 850 jin per mu were harvested. Throughout the country, more than 300 units in 25 provinces, municipalities, and autonomous regions have introduced it for cultivation, and according to rough statistics, the area of introductory planting is somewhere between 20,000 and 30,000 mu. In 1978, the Qinghai Provincial Agricultural Crop Varieties Evaluation and Approval Committee evaluated and approved this variety, and now it has been named "Wandoumai No 1." The Science Conference of Qinghai Province made an award for this accomplishment.

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CSO: 4007

SICHUAN DEVELOPS MALE-STERILE COTTON LINE

Beijing GUANGMING RIBAO in Chinese 28 Aug 80 p 1

[Article by correspondent Li Jiajie [2621 1367 2638]: "Sichuan Scores Major Breakthrough in Cotton Research with 'Dong A' Male-Sterile Line and 'Single Line Double Use'"]

[Text] The National Science Commission and the Ministry of Agriculture have mandated Sichuan Province to organize experts and teachers from 24 agricultural institutions of higher learning and from agricultural institutes to undertake a technical appraisal here in Nanchong today of the great breakthrough in cotton research launched by Sichuan Province that has produced "Dong A" male-sterile line and "single line double use." This major scientific accomplishment has opened a new technological path for the use of the heterosis of hybrid cotton. Use of hybrid heterosis to increase output, improve quality, and increase resistance is a general law. Cotton is no exception. However, inasmuch as large-scale production of hybrid cotton seeds has been difficult for some time, it has not been possible to take full advantage of the heterosis of hybrid cotton. The complete loss of male reproductive capabilities of male-sterile cotton plants makes them very suitable material for use as the female parent in hybridization. Therefore, the discovery and nurturing of such materials received a high degree of attention from scientists and technicians concerned both at home and abroad. In 1978, a cotton technician in Yilong County discovered a primordial plant that was naturally male-sterile among "Dongting No 1" cotton seedlings. It was given the name "Dong A." Later on, the Sichuan Provincial Science Commission organized pertinent research units and institutions of higher learning to pool their resources and work together in undertaking research. Using "Dong A" as the female parent and other cotton seeds for the male parent, they began hybridization. Next, they took sterile-free plants and sterile plants from the following generation to carry out hybridization of brothers and sisters of the same parents, thereby confirming that the recessive gene in the cell nucleus that controls male sterility has applied value in the utilization of hybrid heterosis. Conduct of these cotton research methods, which were called "single line double use," required only 4 years to produce three hybrids. Results were quite rapidly achieved. Application of these research results to production over a wide area demonstrated heteroses of early sprouting, squaring, blooming and boll formation, vigorous growth, large and heavy bolls, and good fiber quality, which produced remarkable results in a more than 20 percent increase.

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CSO: 4007

RADIOACTIVE GENETIC BREEDING SUCCESSFULLY USED

Conference Reviews Accomplishments

Beijing GUANGMING RIBAO in Chinese 31 Aug 80 p 1

[Text] China has had very good success with the use of atomic energy radiation in genetic breeding work. According to incomplete statistics, the total number of superior varieties of farm crops, mulberry trees, fruit trees, vegetables, aquatic products, and tropical crops that have been radioactively bred amounts to 145 nationwide. These are the accomplishments gathered together by the All-China Radioactive Genetic Breeding Work Conference convened in Beijing by the National Science Commission and the Ministry of Agriculture, which was concluded on 25 August.

Radioactive genetic breeding is a new breeding technology. This kind of research work began in 1957 in China. It is said that of the more than 100 varieties that have been bred radioactively nationwide 81 have been spread over an area of more than 100,000 mu, and that 17 varieties have been spread over an area of more than 1 million mu for a total area of more than 70 million mu.

This conference also discussed and formulated a radioactive breeding research program for the next 10 years, setting three major scientific research tasks. 1) Breeding of a group of early maturing, disease resistant, high yield, superior quality new crop varieties and mutants with outstanding characteristics for use over wide areas. 2) Intensification of research in radioactive genetic breeding techniques, and increased efficiency in inducing mutations. 3) Launching of research into the mechanism of radioactive genetic breeding and exploration of new ways to induce mutations.

Delegates to the conference included 117 specialists, teachers and scientists and technicians.

Technique Explained

Beijing GUANGMING RIBAO in Chinese 31 Aug 80 p 1

[Text] Radioactive breeding entails use of atomic energy rays to radiate the seeds of crops or the organs of crops to force the genetic

materials to undergo changes leading to the occurrence of mutations, which through breeding will produce new varieties.

Radioactive breeding is characterized by a high frequency rate for variations, a broad latitude for variations, and generally rapid stabilization of varieties thus bred. It is also able to produce some mutants that would be difficult to derive in nature or through conventional breeding. Characteristics such as early maturation, resistance to disease, and fine quality are examples of characteristics. For example, the Zhejiang Provincial Agricultural Institute's Atomic Energy Unit used 60 r of cobalt to irradiate a variety of "Kezi No 6" paddy rice. After 2 years and 4 months of effort, they bred the new variety, "Yuanfengzao," which ripens 45 days earlier than "Kezi No 6." The new variety of wheat, "Emai No 6" bred by the Hubei Provincial Agricultural Institute; the new variety of corn, "Luyuandan No 4," bred by the Shandong Provincial Agricultural Institute; and the new variety of cotton, "Lumian No 1," bred by the Shandong Provincial Cotton Institute, all possess this characteristic.

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CSO: 4007

FINANCIAL AFFAIRS OF RURAL COMMUNES DISCUSSED

Gujia Production Brigade

Beijing GONGSHE CAIWU [COMMUNE FINANCIAL AFFAIRS] in Chinese No 4, 25 Jul 80 pp 13-14

[Article: "Gujia Production Brigade Launches Campaign of Economic Analysis To Overcome Blind Complacency and Formulate Measures for Increased Production"]

[Text] Gujia Production Brigade in Hehua Commune in Liuyang County, Henan Province reaped a bumper harvest in 1979 and income distributed to commune members averaged 157 yuan. This spring, this brigade aroused the masses to launch a big discussion about building a prosperous brigade. As a result of the discussion, five of the six production teams in the brigade planned to achieve average distributions of income this year amounting to more than 200 yuan. Formulation of this plan increased the confidence of the cadres and masses alike, but there were some people who maintained a feeling of blind optimism. They could see only the good aspects, and were unable to see weak links. They felt that "policies have been implemented this year; the cadres have taken responsibility; and the masses have put their shoulders to the heel, so production naturally went up." In order to overcome this kind of blind complacency, the party branch in the production brigade convened a Production Team Cadre Meeting for the conscientious analysis of economic activities, guiding everybody to compare this year's agricultural production situation with last year's, and to analyze how this year's production differed from last year's in five respects. 1) Spring crop harvests were different from last year. The spring rape harvest produced 4,960 jin of oil last year for an income of 7,630 yuan. This year only 2,080 jin of rape was harvested, and income was 2,648 yuan, a decrease of 4,982 yuan. 2) Tea oil may show a decline in production. Last year tea oil production was 11,600 jin providing an income of 12,466 yuan, but this year only 8,308 jin will be produced for an income of 8,864 yuan, a decline in income of 3,602 yuan. 3) Last year three teams propagated 700 mu of seeds to earn income of 7,200 yuan. This year they halted seed propagation, so this income no longer exists. 4) Collective hog raising continued to decline. Last year income from collective animal raising amounted to 27,403 yuan. This year, hog farms in three teams

were disbanded, and there will be a reduction in income amounting to 12,233 yuan. 5) Sideline occupation processing is off. Last year units of the sideline occupation company brought in materials for processing, but there are no goods to process this year, and income will be reduced by 3,540 yuan. Thus, the total reduction in income will be 31,557 yuan. There are 1,030 people in the entire brigade, so the average per capital reduction in income will be 30.64 yuan. Everybody still looks back to last year when total income for the brigade increased by 64,958 yuan for an average 63 yuan per person. Of this amount, an increase in the price of farm produce brought an increase of 27,091 yuan, or 21 yuan per person. Calculated in terms of no change in price, actual average increased income per commune member would have been only 42 yuan. This year, average total per capital income will show an increase of 60 yuan over last year's 201 yuan, and this required greater exertion than last year and more vigorous measures in order to fulfill the plan.

As a result of the analysis of economic activity, the understanding of the cadres and masses was improved and they all felt that if realization of the plan is to be assured, it will definitely be necessary to put their hands to an increase in per unit yields of the crops currently being grown, make vigorous efforts to open production avenues, and to organize the labor force to advance deeply and broadly in production. As a result of repeated discussion and repeated implementation, they were determined to work hard in three different areas to assure the realization of the plan to build a prosperous brigade.

1. Strive to increase grain yields per unit of area. Following democratic discussion, each production team set to work to get per mu yields of 1400 jin of grain this year from an area of 1,191 mu. The plan calls for increased yields of 141 jin per mu over last year and a total increase in production of 157,000 jin for a possible increase in income of 18,134 yuan.

2. Active development of collective hog raising. In order to reverse the tendency toward decline in collective hog raising, it is necessary to continue to operate collective pig farms, and to have special households raise hogs, and to arouse commune members for private raising of publicly owned hogs. At the present time, 190 of the 230 households in the entire commune are engaged in collectively raising 190 hogs, which will bring an increase in income of 18,460 yuan.

3. Institute continuous production. Last year, the Zejia team began to make xuezaopei [7185 2483 0975] (a pastry), bringing in materials for processing. Within half a month, its income was 2000 yuan. In order to make sure of this income, they decided this year to produce the raw materials themselves, process them themselves, and market the produce themselves. Now there are five units throughout the brigade that are planning to plant 150 mu of glutinous rice, and 9 mu of taro to process 55,000 jin of xuezaopei for a possible income from processing of 9000 yuan.

4. While guaranteeing increased production of grain this year, 48.5 mu of oat grass has been planted as well, and each mu can bring an income of 300 yuan, an increase of 7,290 yuan over last year.

5. Adaptation of methods to local circumstances to change from low income crops to high income crops. There are 48 mu of drylands throughout the brigade, all of which were formerly planted to red anise from which the income was not high. This year, they planted 11.7 mu of medicinal herbs; 3 mu of hybrid gaoliang, and 8 mu of intercropped kumquat trees. Each mu should produce an income of 200 yuan for an increase of 4,220 yuan over last year.

6. Comprehensive use of water sources in an effort to produce more fish. This brigade used to give attention only to the use of water surfaces of mountain ponds for irrigation, neglecting the raising of fish. Last year's annual output of fish from the 62 mu of water surface in the brigade was 7,440 jin, for an income of 7,034 yuan. This year 13,000 fish have already been raised, which should produce 13,500 jin of fish for an income of 11,680 yuan, an increase of 4,626 yuan over last year.

7. Use of slack time on farms to bake bricks and tiles. Last year the brigade baked 410,000 red bricks for an income of 20,500 yuan, and it plans to bake 1 million red bricks this year for an income of 43,000 yuan, or an increase in income of 22,500 yuan.

8. Organize special, full-time groups to handle the business enterprises of the brigade. In order to change the situation of poverty and blankness in the brigade, a 12-man special full-time group responsible to the deputy brigade leader was organized to be responsible for income from brigade enterprises. An agreement between the Foreign Trade Bureau and the Commune and Brigade Enterprises Bureau has already been concluded for the production of 1.5 million fireworks and firecrackers, from which it is estimated one echelon of the brigade can earn an income of 30,000 yuan, an increase of 11,400 yuan over last year.

9. Encourage greater investment in handicraft industry and sideline industry personnel, planned investment in personnel in the handicraft industry and sideline occupation industry as reported by the brigade was 13,416 yuan, an increase of 6,810 yuan over last year.

10. Additional machinery to handle processing of incoming materials and dispatch of products. As a result of its analysis of economic activities, the Nanliu production team immediately purchased a pulverizer in order to increase its income. Put into production, it has already recovered a part of the investment. The three new machines added to the brigade should increase income by 2,357 yuan over last year.

If diligent attention is given to the above 10 measures, a total increase in income of 105,010 yuan should be realized. Deducting a decline in income of 31,357 yuan during the first half of this year as compared with last year, an actual increase of 73,453 yuan in income over last year should be realized, and average total per capita income should increase by 71 yuan. The broad masses of cadres and people have said, "This game of chess is going well. It has cleared our heads, and we have found the road to wealth. Analysis of economic activity is good, and from now on we'll keep doing it every quarter."

Rewards for Excess Production

Beijing GONGSHE CAIWU [COMMUNE FINANCIAL AFFAIRS] in Chinese No 4, 25 Jul 80
p 23

[Article by Xing Jisheng (6717 4480 3932): "Preliminary Exploration of Rewards for Excess Production Issue"]

[Excerpt] Nowadays, a system of responsibility for production with calculation of remuneration for joint output is being promoted in agricultural production everywhere. In most cases, the specific method used is division of production teams into work groups responsible for a fixed output using a fixed amount of labor, with rewards for excess production and punishment for reduced production. Experience has shown that implementation of this method can better combine the collective production and the material welfare of commune members. It is useful in arousing the enthusiasm of the masses, in improving labor productivity, and in promoting the growth of production. But when a work team exceeds production norms, how should it be rewarded? Should it be rewarded with the excess or should it be given a portion? And what is the proper size of this portion? Presently there is no unanimity of understanding about this matter, and the actual methods used in various jurisdictions differ. Consequently, study and solution to this problem for the correct handling of relationships between production teams and work teams requires both maintenance of the production team as the "foundation," preservation of the system of public ownership, and consolidation and strengthening of the collective economy, as well as ensuring that the more common members work, the more they get, and that they stand to gain. This requires implementation of rewards for excess production, which is both beneficial for the development of collective production and beneficial for individuals. If too much emphasis is placed on individuals, the collective economy may be damaged and the significance of the implementation of this system of responsibility may be lost. If too much emphasis is placed on the collective, the welfare of individuals may be damaged and the enthusiasm of the masses dampened. In 1979, the Mamo Production Team of the Chenhu Commune in our county produced grain at a cost of 0.047 yuan per jin as calculated on the basis of its total output and expenses. On the basis of output prescribed for spring, two work teams jointly exceeded production of grain by 22,000 jin, all of which was given the work team without deduction of production expenses, thereby providing the production team with a net subsidy of 1,034 yuan. Last year production costs per jin of grain

were .06 yuan at the Yangba No 1 Brigade of Liqiao Commune. Two work teams jointly exceeded production of grain by 20,893 jin. For the production of this grain, the production team expended 1,255 yuan, and the work teams gave 5,354 jin of the grain to the production team in a 40 percent apportionment to the production team of excess production. In money terms, at a price of .13 yuan per jin, this had a value of 1,128 yuan, and the production team handed back 125 yuan. Obviously, the difference in rewards for excess production given these two work teams was not reasonable.

Calculating Apportionment of Grain

Beijing GONGSHE CAIWU [COMMUNE FINANCIAL AFFAIRS] in Chinese No 4, 25 Jul 80 p 25

[Article by Wang Guanghui (3769 1684 2037): "Use of the per Thousand Rate in the Distribution of Grain"]

[Text] Production teams in rural communes are the basic accounting units for the direct organization of production and distribution. In production teams there are many varieties of grain, and grain for the consumption of commune members is distributed many times. Attention must be given to the proportional mix of the different varieties of grain or the different qualities of the same variety of grain in the total distribution of grain, and a rapid calculation must be made of the amount of grain that should be distributed to every household. A brief explanation is provided here of a method for calculating distribution that employ the per thousand rate, taking into account the human labor ratio. First, use the summer or the autumn accounting table for the calculated take home portion of grain for commune members, figuring the per thousand rate of the total grain distribution in the brigade that is due each household. Each time grain is distributed, no matter the variety, the per thousand rate is used to calculate the amount. Formulas for calculations are as follows:

The per thousand rate for distribution of grain to each household = the amount of grain owing the household ÷ by the total grain distribution throughout the brigade.

The amount of grain due each household each time = the total amount of grain distributed each time X the household's distribution of grain per thousand rate.

For example: A certain production team has 30 households of common members, and the summer allocation of grain totals 20,000 jin. Of this total, Zhang San is due distribution of 600 jin and Li Si is due 400 jin. The remaining 28 households should share the remaining 19,000 jin. Before the first grain is distributed, calculate the per thousand rate for grain distribution to each household on the basis of the formulas given above. The computations are as follows:

(1) the per thousand rate of each jin of grain: $1 \div 20,000 = 0.05\%$,

(2) the per thousand rate of grain due each household: the per thousand rate of grain due Zhang San = $600 \times 0.05\% = 30\%$. The per thousand rate of grain due Li Si = $400 \times 0.05\% = 20\%$.

Let us assume that 5000 jin of wheat is distributed the first time. Zhang San's share of wheat should be $5,000 \times 30\% = 150$ (jin) Li Si's share of wheat should be $5,000 \times 20\% = 100$ (jin) (The remaining household shares may be extrapolated from this)

The second time, 1,500 jin of peas are distributed. Zhang San's share of the peas = $1,500 \times 30\% = 45$ (jin) Li Si's share of the peas = $1,500 \times 20\% = 30$ (jin) (The remaining household shares may be extrapolated from this)

This method of calculating distribution of grain both includes individual amounts due and also includes amounts due on the basis of labor. This method eliminates consideration of the mixing of different varieties of grains or grains of different quality. At final accounts time at year's end when balancing of grain shortages is done, this will save a lot of figuring.

Cutting Costs in Liaoning

Beijing GONGSHE CAIWU [COMMUNE FINANCIAL AFFAIRS] in Chinese No 4, 25 Jul 80
pp 26-27

[Article by Jin County Agricultural and Forestry Bureau: "Jin County Puts Responsibility for Expenses Work Method into Effect"]

[Excerpts] Jin County in Liaoning Province is located on the Liaoning Peninsula in the close-in suburbs of Luda. It is an area with a diversified economy that produces grain, oils, vegetables, fruits, and products of the sea. Since last year, it has put into practice a system of responsibility for expenses in its farmlands, vegetable plots, fruit orchards, fishing industry, hog raising, and farm machines in order to promote increased production and increased income, reduce production expenses, enlarge the collective portion retained, and increase the income of commune members. In a comparison of 1979 with 1978, total grain output throughout the entire county increased 16.3 percent; total edible oil production increased 145.9 percent; total production of fruit increased by 71.4 percent, total production of products of the sea declined by 8.3 percent, and live hogs increased by 1.2 percent. Total income for basic accounting units throughout the county increased by 30.3 percent, and total disbursements amounted to 34.6 percent of total disposable income, for a decline of 5.3 percent. Collective retention amounted to 16.8 percent of total income, an increase of 4.4 percent. Average per capita income was 164 yuan, an increase of 48 yuan.

In 1979, every jurisdiction started out with the system of responsibility for production that had been established everywhere, and production teams, being practical and taking account of past situations, combined the current year's production conditions and production tasks with democratically formulated expense quotas, and instituted a system of responsibility for expenses in work teams. Specifics are as follows:

Cropland production. Production teams instituted "four fixeds" for the work teams, namely, fixed amounts of fertilizer, fixed amounts of seeds, fixed amounts of agricultural pesticides, and fixed amounts of miscellaneous support in horses and vehicles. It was stipulated, in general, that the award for savings of expenditures would be from 50 to 70 percent of the amount saved; the fine for excess expenditures would be from 20 to 30 percent of the excess. No award would be given when reduction in expenditures was accompanied by a decline in production.

Vegetable production. Fixing of specific responsibilities for expenses according to the different situations prevailing in old and new vegetable growing areas. Some instituted the "four fixeds," namely fixed amounts of fertilizer, fixed amounts of agricultural pesticides, fixed amounts of seeds, and fixed amounts of miscellaneous support in horses and vehicles. In addition, they added a fixed amount of plastic sheeting for the protection of the protection of the vegetables to make "five fixeds." Regulations on rewards and punishments were generally the same as for cropland production.

Fruit tree production. The "four fixeds" were instituted down to the team level, namely fixed amounts of fertilizer, fixed amounts of agricultural pesticides, fixed hydroelectric expenses, and fixed expenses for the maintenance and repair of machines. The award for savings while exceeding output norms and exceeding value of output was 50 percent of the saving. When there was a saving while exceeding output norms but not exceeding value of output, no reward was given. When output norms were exceeded and the value of output exceeded but prescribed expenditures were exceeded as well, punishment was payment of 20 percent of the excess expenditures.

Hog production. Fixed amounts of concentrated feed, fixed numbers of implements, and fixed medical expenses were instituted in hog raising with different requirements depending on whether the hogs were male or female, or whether fattened hogs or piglets were being raised. In the implementation of responsibility for expenses at pig farms, work was recorded, for the most part, for net earnings. The greater the net earnings, the greater the sum received; the less the net earnings, the less received.

Care of farm machinery. Accounting for individual machines was instituted throughout. A system of "three fixeds" was instituted for different kinds of machines, namely fixed consumption of petroleum, fixed repair expenses, and fixed maintenance costs. Regulations regarding rewards and punishments were of the two kinds. One was an award of profits in which the award was 10 percent of the amount in excess of the norm. The other was an award for savings in expenditures on individual items. For each 100 jin saving of petroleum, the award was 50 percent of its value (in money terms).

Sideline occupation production. Responsibility according to the kind of sideline occupations involved. First, fixing of reasonable production costs, and the institution of proportional division, as for quarry stone or the export of labor. Second was responsibility for profits with annual profit norms being set and awards offered in the form of a proportion of profits in excess of norms. Third was institution of "five fixeds," namely fixed number of personnel, fixed tasks, fixed amounts of time, fixed expenses, and fixed remuneration. Savings in any category would be rewarded, and excess punished.

In the fishing industry, accounting was done by the single boat with expenses for each boat being set, namely, fixed consumption of petroleum, fixed number of nets, fixed maintenance and repair, and fixed amounts of ice used. Awards of from 20 to 30 percent of any savings in expenditures were given.

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CSO: 4007

BRIEFS

AUTUMN, WINTER SOWING--Preparations for winter wheat sowing are underway in northern China, and rural cadres and commune members are striving to overcome various problems caused by drought, rain or waterlogging. At the completion of summer harvest, meetings were held in various major wheat producing areas to sum up experience gained in summer grain and oilseed production and to map plans for autumn and winter sowing, paying special attention to the entire farming structure and to the annual crop plans; and rational adjustments to the over-wintering crop acreage were made. As a result, this year's autumn and winter sowing acreage is smaller than that of last year, and it will be necessary to raise the unit yield in order to increase the total output. While keeping the acreage of winter-sown grain and green manure crops stable, provinces along the Changjiang River plan to expand their rape acreage this year. Despite recent rainfall, which is good for wheat sowing, some areas in northern China still do not have sufficient rainfall and soil moisture for sowing, making counter-drought measures necessary. [Beijing RENMIN RIBAO in Chinese 21 Sep 80 p 1]

WHEAT DISEASE CONFERENCE--The Fifth National Conference on the Prevention and Study of the Take-All Disease [quan shi bing] of wheat was recently held in Taian, Shandong. Domestic and foreign methods to prevent and treat the disease were introduced at the conference. This disease has already appeared in 17 provinces and municipalities. Shandong Province and the Hexi corridor are the most seriously afflicted areas. [Jinan Shandong Provincial Service in Mandarin 2300 GMT 17 Sep 80 SK]

CSO: 4007

BRIEFS

PEST CONTROL--In view of the threat of rice pests brought into the province by excessive rains in mid and late-August, the Anhui Provincial Government has issued a circular calling on all localities to take measures to protect late-autumn crops against pests. Recalling its losses in double-crop late-rice production caused by a major pest in 1975, Anqing Prefecture has aroused the people to whip up an upsurge in the prevention of pests. As of now, the prefecture has carried out preventive activities on its more than 1.7 million mu of crop land. Chaohu Prefecture has also completed such activities on some 2.7 million mu as a first-stage task. Wuhu, Huizhou, Luan and Chuxian prefectures have taken necessary initial measures in the light of the pest situation in their areas. [Hefei Anhui Provincial Service in Mandarin 1100 GMT 1 Oct 80 OW]

AUTUMN CROPS CONFERENCE--Hefei, 20 Sep (XINHUA)--Instead of letting the provincial agricultural committee hold the annual autumn crops conference alone, the Anhui CCP Committee this year invited some noted scientists and agrotechnical cadres to attend. Together with the leading cadres of wheat-producing areas, they discussed how to increase wheat production in Huaiabei. Wang Tengjiao, vice president of the Anhui Academy of Agricultural Sciences, called for rational application of fertilizer. Wang Jingcao, deputy director of the provincial scientific and technological committee, proposed to establish a rational agricultural structure as a means of increasing wheat production. Yang Jike, vice governor of Anhui, emphasized giving play to localities' strong points. [OW241321 Beijing XINHUA Domestic Service in Chinese 0727 GMT 20 Sep 80 OW]

CSO: 4007

BRIEFS

FIELD TENDING CONFERENCE--The Fujian Provincial CCP Committee and the Provincial People's Government held a provincial telephone conference on the evening of 15 September. The conference called on all localities to strengthen leadership, concentrate efforts, strengthen the late-stage field tending work in September and October, firmly grasp the production of autumn grain and industrial crops and do everything possible to reap a bumper harvest. Guo Chao, secretary of the Fujian Provincial CCP Committee and vice governor of Fujian, presided over the conference; and Wen Fushan, Standing Committee member of the Fujian Provincial CCP Committee, spoke. [HK220357 Fuzhou Fujian Provincial Service in Mandarin 1035 GMT 16 Sep 80 HK]

CSO: 4007

FIGURES ON RAISING CATTLE ON MOUNTAIN LAND QUESTIONED

Guangzhou NANFANG RIBAO in Chinese 21 Aug 80 p 2

[Article by Zhang Heqing (1728 3109 3237), Planning Office, Zhanjiang Farm Reclamation Bureau: "This Account Has Been Wrongly Figured"]

[Text] On 26 July, the NANFANG RIBAO published an article written by Comrade Li Peiwen (2621 3099 2429), deputy director of the South China Agricultural Institute, titled "Look Not Only to a Few Mu of Land But Also to the Mountains for Food." In this article, the accounting on cattle raising was incorrect, and it is raised here for study.

This is how Comrade Li Peiwen figured cattle raising in mountain areas. Guangdong Province has 180 million mu of mountains of which half, or 90 million mu, could be used for livestock bases. According to data from the Hainan Livestock Institute, 5.5 mu of mountainland is required to raise a single head of livestock, and just about 20 million cattle could be raised on the 90 million mu. But we would not raise that many, but rather only 8 million head. At a live weight of 500 shijin per head and a dressing percentage of 62 percent, each head would yield more than 300 jin of meat. From the 8 million head throughout the province, the yield would be more than 2.5 billion jin of meat, the equivalent of 5 billion jin of grain. In terms of calories, it would be the equivalent of 12.5 billion jin of grain. Therefore, the annual shortfall of more than 3 billion jin of grain could be solved entirely by the people of Guangdong themselves without imports or without the need for transfers of grain from other provinces.

This accounting method merits deliberation.

First of all, the capacity of mountain areas for the raising of cattle is not the same as the figures for slaughter cattle. For one thing, even though use of mountain land for the raising of cattle is a major action meriting attention throughout the province, a certain number of cows and bulls have to be kept, and these animals cannot be figured as slaughter cattle in calculating the quantity of meat produced. Secondly, to get a live weight of 500 shijin under good feeding conditions is not

hard to achieve within 1 to 1.5 years, but with feeding on a large area of mountain land, it would be hard to achieve within 2.5 to 3 years or even longer. So, except for the slaughter cattle provided for slaughter in a given year, we would have to continue to raise again as many or twice again as many calves or heifers awaiting fattening. Third, no matter whether it is cows, bulls, calves, or heifers being fattened, there is no assurance of a 100-percent survival rate, nor will each cow produce two healthy calves every 3 years. Therefore, for every 8 million head of cattle, only 2 million (calculated at 3 years for raising) or 2.4 million (calculated at 2.5 years for raising) of slaughter cattle will be provided for butchering. Even were no breeding cattle to be raised in the mountains of Guangdong but calves imported entirely from elsewhere (which is actually an impossibility), at best between 2.6 million and 3 million head of slaughter cattle would be produced yearly. It would be absolutely impossible to get 8 million.

Second of all, for an annual yield of 8 million slaughter cattle, about 30 million head of cattle would have to be raised in mountain regions throughout the province. If each head required 5.5 mu of land, a total of 165 million mu of mountain land would be required. If there is only 180 million mu of mountain land in all Guangdong, I fear 165 million mu could not be spared for cattle raising.

Third is the matter of the conversion of meat to grain terms. In the calculation of calories, 1 jin of beef equaled 5 jin of grain. Production of 8 million slaughter cattle throughout the province would be the equivalent of 12.5 billion jin of grain, not only sufficient to solve the grain shortfall for all of Guangdong Province, but enough to provide a huge surplus as well. Even were only 2 million head of cattle to be produced annually, that would be just about enough. Whether or not 1 jin of beef is the equivalent of 5 jin of grain is a matter related to people's life styles. Some people prefer 5 jin of grain to 1 jin of beef, while other people are just the opposite. A total 1 to 5 conversion would not be very workable, I fear.

Fourth, I feel that the simplistic deduction of a percentage of all the mountain land in Guangdong Province as an area devoted to the raising of cattle is unscientific. Such calculations frequently are far removed from realities. For example, it would be very difficult to raise cattle in the high mountains, or in rocky mountains where no grass grows, or in mountain wildernesses far removed from population centers. As to just how much mountain land should be devoted to the raising of cattle requires a general survey from bottom to top, and most important is a soliciting of the views of the masses. From an economic angle, cattle raising is not the optimum program for the utilization of mountain wildernesses. For example, their per mu output value is not as great as forests.

The above several points are merely my personal views and do not constitute opposition to cattle raising in mountain areas of Guangdong Province nor a negation of Comrade Li Peiwen's article. The purpose for these remarks is only to express my own viewpoint.

SHENZHEN HOLDS MEETING ON DEVELOPING AGRICULTURE

HK030116 Guangzhou Guangdong Provincial Service in Mandarin 2345 GMT
2 Oct 80

[Excerpts] The Shenzhen Municipal CCP Committee recently held an enlarged Standing Committee meeting, which demanded that the people of the municipality work hard in concert to promote agricultural production so as to stimulate the building of the special zone and strive to build the Shenzhen special zone into a modern city. Guangdong Provincial CCP Committee secretary Wu Nansheng presided and spoke at the meeting.

The meeting held: The construction of special economic zones at the great southern gateway of the motherland is a new affair which has attracted domestic and foreign attention. However, in building the special zones, we cannot neglect agriculture. The special policies and flexible measures are closely linked to agriculture. Only if agriculture is promoted can we fill the Hong Kong markets with more commodities and get more foreign exchange for speeding up the building of the special zones. Hence, we certainly cannot abandon agricultural production when building the special zones; we should build up the rural areas of Shenzhen Municipality as the outskirts of the special zone and as a base for agricultural and sideline production.

The meeting stressed: The leaders of the zone and the communes must concentrate efforts on promoting rural work and grasping agricultural production. They must not spend too much energy on economic dealings with foreign countries.

CSO: 4007

LETTERS COMPLAIN OF FARM CHEMICAL MISUSE

Guangzhou NANFANG RIBAO in Chinese 23 Aug 80 p 2

[Letters to the Editor]

[Text] Editor's Note: Though the problems reflected in the several letters to the editor printed here are individual phenomena, they also deserve attention. Willful adulteration of food with toxic farm chemicals constitutes criminal behavior that seriously endangers the health of the populace, and which must be firmly stopped. Recently letters from the masses everywhere report quite a few problems existing in the hygiene of food in rural markets. It is hoped that leaders and market managers concerned as well as health and epidemic prevention departments will do a good job of diligently propagandizing knowledge of hygiene, will formulate needed regulations for policing hygiene, and will frequently carry out inspections and checks, promptly putting a stop to or otherwise handling anything not in accord with sanitary requirements.

Comrade Editor:

Recently the Xinxing County Health and Epidemic Prevention Department discovered that a food called "deep fat fries" sold from a privately operated stall at the Jicheng Commune country fair was contaminated with the agricultural pesticide, Rogor. A check of 12 stalls revealed that this was the case at all of them.

"Deep fat fries" are made from soybeans. It is said that when "deep fat fries" are being fried, mixing in a little bit of Rogor makes the "deep fat fries" shiny and gives them an attractive color. This is criminal behavior that damages others for one's own profit. Rogor is a highly toxic agricultural pesticide, and even though no symptoms of poisoning result at once when people ingest it, it can cause damage to human health. It is recommended that health and epidemic prevention

departments intensify health checks of small food stalls to promptly put a stop to anything that does not meet with sanitary requirements, and deal seriously with offenders.

Xinxing County CCP Committee, Huang Erchong [7806 1422 1504]

Comrade Editor:

Now when the weather is so unrelentingly hot and food spoils easily, extreme attention should be given to sanitation and the prevention of spoilage. Nevertheless, some aquatic products units and individual enterprisers offer rotten salted fish for sale in the markets. In an effort to earn money and make profits, some people sprinkle organic phosphate insecticide or Rogor insecticide on the salted fish, and this seriously endangers the health of the masses. One day recently, eight or nine people became poisoned from eating salted fish at the Jinshan country fair in Wenchang County. Two children of a cadre at the broadcasting station of my commune were poisoned from eating salted fish on which pesticides had been used to prevent spoilage. A hospital saved them, but it was 10 days before they were out of danger. We call upon leadership at all echelons and on sanitation and epidemic prevention and market management authorities to intensify their supervision and checking of markets to put a firm stop to the reckless use of pesticides to prevent spoilage of salted fish and other food items, and to conscientiously propagandize scientific knowledge of sanitation in order to protect the health of the masses.

Jinshan Commune, Wenchang County, Lu Liequan [0712 3525 0356] and Han Lunguang [7281 0243 0342]

Comrade Editor:

Here in Gaozhou County, accidents involving injury or death to people and farm animals are constantly occurring simply because some communes and organizations do not pay attention to safe use and care of agricultural pesticides. For example, some people became poisoned from eating fish contaminated with the pesticide, Toxaphene, and from drinking polluted water. When some production teams used "zinc phosphate" to poison rats, they did not have people who knew what they were doing put out the bait or recover the bait. The poisoned bait got out into the open country where fowl and farm animals ate it and became poisoned. In order to insure the safety of people and farm animals, Gaozhou County recently required every commune and production brigade to launch vigorous propaganda to educate people in the safe use of pesticides, to make diligent efforts to intensify the safe handling of pesticides, and to firmly prohibit the use of pesticides in ponds, rivers, pools or catchments to poison fish, so as to avoid pollution of water sources.

Gaozhou County, Zhong Xunfu [6945 3169 4395]

UTILIZATION OF OCEAN FISHING RESOURCES URGED

Guangzhou NANFANG RIBAO in Chinese 7 Aug 80 p 2

[Article by Fei Hongnian [6316 7703 1628], Nanhai Aquatic Products Institute, National Aquatic Products Bureau. "Use Guangdong's Special Advantage; Develop the Ocean Fishing Industry"]

[Text] Guangdong is a coastal province that fronts on the boundless South China Sea. It has a coastline several thousand kilometers long, an island coastline of 2,500 kilometers, 562 islands and islets, and 151 fishing ports, which are extremely beneficial to the development of an ocean fishing industry (ocean fishing and ocean hatcheries). The ocean fishing industry in Guangdong Province provides a certain proportion of the output of aquatic products nationwide, and it amounts to more than 70 percent of the total output of aquatic products throughout the province. However, for many years the situation in the Guangdong fishing industry has been as follows: Increases in numbers of fishing boats, and their horsepower has not been commensurate with resources, and as a result the phenomenon of excessive use of inshore ocean resources has occurred, while the ocean hatchery industry has remained in a state of stagnation. Now when the NANFANG RIBAO is about to begin a discussion on the subject of "How To Make the Most of Guangdong's Special Advantage and Enliven the Economy," I would like to take this opportunity to air a few personal views about the special advantages of Guangdong's ocean fishing industry and the future emphasis of work.

Let us talk first about the special advantages of Guangdong's ocean fishing industry.

The area of the South China Sea is vast, amounting to a 440,000 square mile continental shelf of fishing area of which the Tongking Gulf comprises 120,000 square kilometers. As a result of limitations in the horsepower, tonnage, and equipment of fishing boats, most fishing boats, including motorized boats, motorized sailboats, and junks, concentrate their fishing in inshore areas with a water depth of less than 100 meters. In water depths of less than 60 meters, fishing boats are especially tightly packed, creating a phenomenon of excessive fishing of inshore

aquatic resources. But aquatic resources at ocean depths of from over 100 to 200 meters have not been fully utilized. The results of experimental fishing done by a survey ship of the Sanhai Aquatic Products Institute in recent years has demonstrated that outer ocean areas of the South China Sea are areas with a future for development where fishing netted large amounts of deep water crustaceans and deep water fish. Therefore, in the face of a situation of overfishing of aquatic resources in inshore areas, attention must be turned to this beneficial alternative, and deep ocean fishing should be actively developed.

The South China Sea is located in the tropics and semi-tropics where a variety of fish abound, and where close to 1000 varieties have been recorded. This is more than the total number for the East China Sea, the Yellow Sea and the Bohai combined. But a large number of varieties does not mean that there is an abundance of every kind. On the contrary, the quantity of the individual varieties of the major economic fish are far from being as numerous here as in the East China Sea and the Yellow Sea. For example, in the East China Sea, annual output of hairtails and large yellow croakers is almost 1 million tons, while it amounts to 100,000 tons in the South China Sea, and other varieties in small and scattered schools is unfavorable to high per net catches, and this characteristic may be put to use in the development of trawling, seining, harpooning, and angling operations. In the case of harpooning and angling, not only is no damage done to fish resources, but superior quality fish of high value may be sought this way. Guangdong fishermen have abundant experience with diversified fishing operations, but it was only in 1966 following success in purse seining using lights that a tendency toward standardization of a single kind of fishing operation became apparent. It is necessary to change the unhealthy tendency of seeking after quantity and not seeking for quality. We should use the numerous varieties of fish to vigorously develop diversified operations.

At the present time ocean fishing throughout the world is facing danger from overuse of resources. Reportedly 25 of the world's fishing grounds are being overfished to one degree or another. Between 1968 and 1978, total world production of aquatic products fluctuated around 70 million tons, and the 6.8 percent increase maintained for the previous 20 years had disappeared. The situation in every ocean area of our country is the same as this. In the face of this generally unfavorable tendency, most fish in inshore ocean areas of Guangdong have a short life cycle (usually from 4 to 7 years); they grow rapidly, reach early sexual maturity, have a long period of reproduction, and a quick renewal of generations. When excessive use of resources shows up in their destruction, all that is necessary is adoption of active protection measures, and they will quickly revive. For example, erchangjidiao [0059 7022 2765 9648] [probably a kind of porgy] are a superior quality fish found in fair abundance in the Tongking Gulf, which for 30 years were put under great fishing pressure by fleets of Japanese fishing boats. Additionally, their young were fished for along the shore by the masses, as a result

of which this resource was seriously damaged. In implementation of the 1964 State Council promulgated trial regulations pertaining to protection of the breeding of aquatic resources, the catch of small fish was prohibited for 2 years. During the third year, large numbers of erchangjidiao were seen once again in the fishing grounds. Unfortunately the regulation was not kept in effect, and further damage has been done in recent years. This example shows that replacement of generations is rapid, and the characteristic of easy renewal of resources is one that Guangdong can use to advantage. With a rational use of resources, and the adoption of specific measures in regard to resources that have been damaged, the resources can be revived.

Ocean hatching has a long history in Guangdong Province. It began several hundred years earlier than in other countries of Southeast Asia, so the masses possess abundant experience in hatching. Hatched varieties include fish, oysters, mussels, abalone, scallops, pearl oysters, area subsrenata lishchke, varieties of prawns, red algae, and laver. The shallow ocean area that the Guangdong coast provides for hatching amounts to 1.73 million mu, of which only 470,000 mu is used at best. During the Great Cultural Revolution, large-scale reclamation of the sea to create farmland destroyed a lot of fish spawning grounds, so now the breeding area is only somewhat more than 200,000 mu. Internationally there is a major trend toward future development of ocean hatcheries. It can provide people with rare fish, shrimp, and mollusks, and hatching costs are low. The shallow seas around Guangdong provide a naturally endowed environment for ocean hatching, but the quantity of ocean hatching is presently very low. All that is necessary is for the leadership to give serious attention, and they will be able to make full use of superior conditions to revive and advance the untapped potential of the ocean hatching industry, which is very great. In addition, in the area of neighboring Hong Kong and Macao, and particularly in the two cities of Shenchuan and Zhuhai, which the State Council has designated as special economic areas, foreign traders and fellow countrymen from Hong Kong and Macao are welcome to come forward and invest in joint enterprises. If this is done, not much time will be required for the rapid development of Guangdong's ocean hatching industry, and not only will the people be provided with more protein from aquatic products, but they can be easily exported to earn foreign exchange.

Several recommendations about future work emphasis are given below.

First, adoption of effective measures to actively protect aquatic resources in inshore areas. During the past 2 years, the State Aquatic Products Bureau and the China Aquatic Products Society have convened several conferences to discuss the problem of aquatic product resources. Aquatic product specialists from throughout the country unanimously acknowledge that China's inshore aquatic product resources are being destroyed in varying degrees, and they have put forward urgent proposals for the protection of inshore aquatic product resources. They have called upon all coastal areas to reduce the number of fishing boats, reduce quantity of catches and restrict intensity of fishing to give the resources opportunity to rest and recuperate in order

to help future development. A proper handling of the relationship between the interests of a part and the interests of the whole, and the interests of the present versus the interests of the distant future, as well as genuine intensification of government management of the fishing industry are guarantees for the continued development of the fishing industry. It is proposed that as of now a fairly scientific investigation be done of whether the various components of the inshore fishing industry have acted sensibly. This investigation should combine plans for reductions in the number of boats and the quantity of catches. During 1981, one commune should be selected as a test site in every coastal prefecture and a work team be organized consisting of representatives of the provincial bureau, local bureaus and of fishermen with participation by research institutes as well, for the purpose of making a concrete investigation and study of coordinated plans by the fishing industry, and additionally for the purpose of making satisfactory arrangements on the problem of the fishermen's future livelihoods with transfers, when necessary, to ocean hatcheries. Before 1985, the entire readjustment should be completed.

Second, vigorous development of the shrimp hatching industry. Everyone knows that prawns are a wonderful seafood, which command a high price in the international marketplace, with each ton selling for more than \$3,000. Nevertheless, the quantity of prawn exports from Guangdong Province is not great. China's principal production area for export prawns is Bohai, but because of problems in preserving freshness and in transportation, the quality of these prawns is marred and the export price sharply reduced. If Guangdong could get a prawn hatching industry going with the product being sold directly in Hong Kong and Macao markets, a great amount of foreign exchange could be earned. The pertinent techniques for hatching prawns are substantially in hand. The South China Sea Aquatic Products Institute has been conducting experiments in prawn hatching at Zhanjiang and has had good results, with per mu yields of more than 700 jin from small areas (1.5 mu). Were nine special economic areas to set up prawn hatchery bases within the next 5 years, average per mu yields of 500 jin would be entirely attainable. Additionally, thorough investigation and planning should be done on varieties that have been hatched traditionally and on how to increase hatching in the shallow ocean and in harbors and bays.

Third, actively develop deep sea aquatic resources in the South China Sea. Deep ocean areas of the South China Sea where water depth is greater than 100 meters have a definite developmental value. During a survey made in 1978 and 1979, average per net catches of more than 600 kilograms were landed, and the highest catch was 8000 kilograms. The principal kinds of fish and crustaceans caught were deep water fish, including blunt headed dipterus, fatty eyed dipterus [0430 7345 2106 3189 5802], daopei [0430 7345 2106] sea shrimp, Oriental spiral shrimp [5205 5802], and long legged red shrimp [7022 6398 4767 5802], all of which have definite food value. It is recommended that there be organized, first of all, high performance boats suited to deep sea operations, facilities for assisting fishermen,

and instruments to help with navigation in ocean areas deeper than 100 meters. State owned company boats should have priority in this equipment. In this way, full use can be made of deep ocean aquatic product resources, and fishing pressure on inshore areas can be lightened.

In summary, if we do comprehensive and sensible planning based on the realities as they exist in Guangdong's South China Sea fishing industry, making the most of advantages while avoiding disadvantages, we certainly will be able to transform the present state of the ocean fishing industry.

9342

CSO: 4007

PROVINCIAL GRAIN DEPARTMENT INVESTIGATES GRAIN, OIL PRICES

Guangzhou NANFANG RIBAO in Chinese 6 Aug 80 p 2

[Article by Li Zikang [2621 1311 1660]: "Provincial Grain Departments Investigate Grain and Oil Prices Throughout the Province To Strengthen Management Over Grain and Oil Prices and to Protect the Interests of the State and of the People"]

[Text] Throughout this year, Guangdong Provincial Grain Departments have been conducting a mass type investigation of management work on grain and oil prices throughout the province. This work has been launched in 1,231 grain management offices and in 1,912 grass roots grain shops, warehouses, processing plants and storage depots in 86 counties (or municipalities).

The investigations have found that an absolute majority of grain departments handle matters strictly in accordance with state criteria for the processing of grain and oil, but there are individual places in which grain and oil do not attain the standards for quality set by the state. The grain contains a lot of grit, numerous unhusked grains, and extraneous material. A minority of grain departments have not rigidly carried out the system for managing the prices of grain and oil. Wrong prices were constantly found. The investigation turned up 24,484 cases of wrong pricing throughout the province, and there were many instances in which the state was shorted on revenues or the masses paid too much. Incomplete statistics from the four prefectures of Foshan, Huiyang, Shantou, and Shaoguan show that the state received more than 13,600 yuan less than it should have, and the masses overpaid to the tune of more than 15,700 yuan. Throughout the province 8.16 percent of the 5,698 scales and measures used for selling grain and oil were found defective.

The Provincial Grain Department has called on grain departments in every jurisdiction to genuinely intensify management over grain and oil prices, and to strictly enforce discipline over grain and oil prices to prevent and to correct unauthorized price increases and disguised price increases in carrying out the unified grain and oil prices from higher authority. They should devote diligent attention to improvement of the quality of grain and oil products, treating this as an important task, and all grain and oil that does not meet the quality standards established by the state should not be allowed to leave the plant, should not be allowed to be transported, and should

not be allowed to be sold. Forces should be organized for a complete check of the various measuring devices currently in use, and those that have been damaged beyond repair should be retired from use at once so that full measure of grain and oil sold will be assured. Shortchanging should be investigated with prompt repayment to the masses in order to preserve the integrity of state-owned enterprises.

9432

CSO: 4007

GRAIN DEPARTMENTS STEP UP MIXED FEED PRODUCTION

Guangzhou NANFANG RIBAO in Chinese 3 Aug 80 p 2

[Article by Li Tzukung [2621 1311 1660]

[Text] Grain departments in Guangdong Province have been actively working on mixed feeds, and now 25 counties in 6 prefectures have begun this work. Last year they produced more than 32 million jin of mixed feed. Between January and May of this year, total production of mixed feed throughout the province was 20.12 million jin, a 44.23 percent increase over last year.

Mixed feed is a new variety of feed produced by the grain departments of Guangdong Province. Mixed feed consists principally of by-products from the processing of grain oil to which have been added some vitamins and minerals and protein according to the nutritional standards for varying growth periods in animals. These are compounded scientifically. Mixed feed is better than a single concentrated feed. On the basis of calculation of last year's production of 32 million jin of mixed feed, the province saved more than 6 million jin of concentrated feed. This was of great significance in changing the current feeding structure, in improving the feed utilization rate, in conserving grain, in lowering costs, in shortening the time required to fatten animals, and in promoting the modernization of the feed industry. During last year, Guangzhou municipal feed departments provided more than 10 million jin of mixed feed, virtually satisfying needs for the development of the animal raising industry in this city. Last year, Qingyuan County sold a total of more than 6.5 million jin of mixed feed, a two and one-half fold increase over 1978. According to a survey of some hog farms, hogs fed mixed feed showed a daily weight gain of 1.2 jin, and piglets kept in pens for 4 or 5 months grew to more than 180 jin. This is from 4 to 5 months less than is required for hogs fed on tongkang (a pig feed consisting of 40-70 percent hull meal and the remainder rice bran).

9432

CSO: 4007

WUCHUAN COUNTY PROMOTES JUTE GROWING

Guangzhou NANFANG RIBAO in Chinese 30 Jul 80 p 1

[Article by Huang Sizhui (7806 0934 6923)]

[Text] The campaign by Wuchuan County for initiation of scientific growing of jute has striven to popularize advanced jute growing techniques and scientific knowledge, and has vigorously promoted the development of jute production.

Throughout the county, jute output per unit of area has risen from 246 jin in the 1950's to 684 jin during the 1970's to become the national high yield county. Wuchuan County is the principal jute producing area of Guangdong Province. The dominant peasant variety that was formerly grown, "Wuchuan Danhongpi," had squat plants, flowered early, had a thin exterior and low output. Subsequently, the Jute Technology Promotion Station of Wuchuan County introduced the two fine varieties, "Xinyuan No 1" and Yueyuan No 5" from elsewhere, after which per mu yields of jute increased to more than 500 jin. Afterward, the Promotion Station each year organized the masses to purify and rejuvenate the "Yueyuan No 5" in order to make it the dominant variety throughout the county. In order to meet requirements for three crops a year, the Promotion Station's technicians began experiments in 1964 on the breeding of jute hybrids. After 6 years effort, they finally bred "401," a medium maturing, disease resistant, high yielding superior variety of jute, and popularized its planting throughout the county. Last year "401" superior variety jute obtained a provincial prize. The area planted to jute annually in Wuchuan County amounts to about 15 percent of the area planted to early rice. Jute cultivation was formerly concentrated in the sandy region of the Jianjiang Plain. But after many years of continuous cropping there, the jute fell prey to more and more diseases and insect pests, leading to a stunting of the plants, early withering, and low yields. In view of this situation, scientists and technicians at the Promotion Station went down into the jute growing area where they worked together with commune members to lower the water table, increase applications of organic fertilizer, and mix sand into the soil to change it. They were successful in growing jute in clay soil, thereby forging a new road in increased per unit output of jute in Wuchuan County.

MANAGEMENT OF STORAGE FACILITIES IMPROVED

Guangzhou NANFANG RIBAO in Chinese 1 Aug 80 p 2

[Article by Feng Fenghe [7458 7364 0735] and Ceng Tao [2582 3447]]

[Text] The Fengshun County Commerce Bureau, which was last year designated an advanced unit in storage nationwide, has undertaken a prompt restructuring in light of new developments in warehouses to increase further the level of management of safe storage.

The Fengshun County Commerce Bureau has 24 warehouses, large and small, under its jurisdiction, with a storage area of more than 15,000 cubic meters and goods of more than 7,500 kinds. Amount of goods transported annually runs to more than 24,000 tons. As the varieties of goods handled has mounted, for a time some warehouses let the goods pile up in great disorder. They were uncertain of types of goods on hand; the warehouse utilization rate was not high; and some goods even molded. For this reason, the Commerce Bureau selected for restructuring those warehouses where the varieties of goods most frequently called for were stored, those in which there was frequent inward and outward movement of merchandise, and those containing stationery and knit goods. Utilization rate for most storage rose by from 20 to 30 percent; the error rate declined by 45 percent; the damage rate declined by 32 percent; and movement of goods in and out became more convenient with a rise in efficiency. The Commerce Bureau promptly promoted the experiences of these units elsewhere and organized warehouse management personnel from within the county system to participate in study. Furthermore, they organized all warehouse work teams under the leadership of leading cadres themselves to go to the Jiaohua Hardware Company warehouse, where work was in a backward state, to help out with an overall restructuring. After 20 days of effort, they changed the entire appearance of the warehouse.

Having made a thorough restructuring, the Commerce Bureau aroused the masses to perfect and formulate a warehouse management system that would be jointly respected. It has "10 bewares," and "10 do nots," plus specific requirements for "attractive display of merchandise, orderly stacking, management through a card system, and cleanliness and hygiene as a matter of routine" in a strict enforcement of a system of responsibility for safe management.

9432

CSO: 4007

BRIEFS

PEANUT, SOYBEAN PRODUCTION--Guangdong Province's rural villages have actively developed the economic crops, peanuts and soybeans. This year, more than 4.8 million mu of spring peanuts were planted throughout the province, an increase of 360,000 mu over last year. More than 1.3 million mu of soybeans were planted, an increase of more than 100,000 mu over last year. Widespread planting of peanuts and soybeans not only can increase the income of the collective economy and improve the livelihood of commune members, but by rotational cropping in wet and dry lands, it is an effective means for increasing soil fertility. The sandy region of the Pearl River Delta, which is crisscrossed with waterways, and where few peanuts have ever been grown, this year invested some land in the cultivation of peanuts. This both solved the farmer's difficulty locally in getting edible oil, and effectively nurtured the fertility of the soil [Text] [Guangzhou NANFANG RIBAO in Chinese 30 Jul 80 p 1] 9432

ZHANJIANG PREFECTURE GRAIN, OIL PROCUREMENT--The broad masses of rural cadres and commune members in Zhanjiang Prefecture have leaped to sell the state peanuts and oil. As of 24 July, the entire prefecture had completed ahead of schedule its total year's quota for sales of edible oil to the state, and edible oil in warehouses amounted to 12.42 million jin more than for the same period last year. Both the speed of putting oil into the warehouses and the good completion of quotas is such as has not been seen for the past 10 years. Zhanjiang Prefecture is a famous peanut producing area in Guangdong Province. This year the entire prefecture planted 1.07 million mu of spring peanuts, and thanks to a general establishment of a system of responsibility for production and the promotion of advanced techniques, both per unit output and total output of spring peanuts increased over the same period last year. In order to do a good job in state procurement of edible oil, this year every jurisdiction diligently simplified procedures for state procurement and placing oil in warehouses. Every echelon of grain departments also thought of ways to accommodate the masses, instituting acceptance upon arrival. [by Huang Shaocan [7806 4801 3503]] [Text] [Guangzhou NANFANG RIBAO in Chinese 3 Aug 80 p 1] 9432

HEYUAN COUNTY SOYBEAN HARVEST--Heyuan County had a bumper summer harvest of soybeans this year. The 25 rural communes throughout the county harvested a total of 47,353 dan of soybeans, an increase in output of 11,757 dan or 33 percent over last year, which was the highest output on record for the same period. [by Qin Hantang [8002 3352 1016]] [Text] [Guangzhou NANFANG RIBAO in Chinese 30 Jul 80 p 2] 9432

CSO: 4007

HEBEI

BRIEFS

COTTON HARVEST--Shijiazhuang, 23 Sep--Hebei Province, one of China's major cotton-growing areas, reaped a rich cotton harvest this year. As of 20 September, the province had procured 68 million jin of new cotton, some 20 times the quantity procured in the corresponding period last year. This year, most of the province's 120,000 cotton-growing brigades have implemented the system of responsibilities in production and organized some 94,000 cotton-growing groups with 1.14 million people participating. In addition, some 250,000 cotton-growing technicians and able hands have been trained. [OW291341 Beijing XINHUA Domestic Service in Chinese 1143 GMT 23 Sep 80 OW]

CSO: 4007

CONFERENCE ON FARM MECHANIZATION, RECLAMATION HELD

SK301514 Harbin Heilongjiang Provincial Service in Mandarin 1100 GMT
29 Sep 80

[Excerpts] According to our reporters (Wang Hongshi) and (Liu Baiying), the provincial work conference on agricultural mechanization and land reclamation was concluded in Harbin Municipality today. The conference noted that to develop farm mechanization in our province it is necessary to adhere to the principle of bringing the leaders' enthusiasm into play and advancing steadily.

Farm mechanization should first be carried out in the border areas, mountainous areas, wheat and soybean fields and in sowing, cultivation and transport and then in inland areas, plains, cereal croplands and in weeding and field crop harvesting operations. With the production brigades as the basic units, farm mechanization should be gradually achieved in the border areas and inland crop-producing areas in 2 to 3 years and in the mountainous and semi-mountainous areas in 3 to 4 years. In cereal crop-producing areas, brigades which are comparatively well off that primarily produce wheat and soybeans, and brigades with vast territories and sparse population, with many avenues for developing diversified economy, may speed up farm mechanization in a proper way. Other brigades should slow down their speed in carrying out farm mechanization and may achieve this target in a longer period of time. In the next 2 years, the main task is to sum up experience in carrying out experiments in selected units and to further expand the scope of these experiments. Proper attention should be given to the replenishment of urgently needed farm machines and the fulfillment of machine-sowing task. Management of the existing farm machines should be strengthened and their usefulness should be brought into full play so as to gradually achieve farm mechanization.

The conference also called for bringing into play our province's advantage in having much wasteland suitable for farming, reclamation in a planned manner and expanding the farming acreage. The conference noted: Our province plans to reclaim 25 million mu of land by 1985.

In reclamation areas we must reserve 10 percent of forest lands and 10 percent of pastoral lands for carrying out agriculture, animal husbandry and forestry to establish a better and more rational ecological balance. We must act in accordance with the demands of rational utilization of land resources, doing a good job in farm crops cultivation, developing animal husbandry, sideline occupations, fishery, industry and farmland capital construction and on mapping out plans for establishing new villages.

CSO: 4007

BRIEFS

PADDY RICE--Hejiang Prefecture, Heilongjiang Province, reaped a rich harvest in its 608,000 mu of paddy fields. Average per mu yield is estimated at 500 jin and total output at about 300 million jin--15 percent higher than in 1979. [SK272320 Harbin Heilongjiang Provincial Service in Mandarin 1100 GMT 25 Sep 80 SK]

PREFECTURE SHEEP BREEDING--With 16.6 million mu of grasslands and reed ponds, Nenjiang Prefecture in Heilongjiang Province is vigorously developing sheep raising. The number of sheep raised by both collectives and individuals has reached 1,002,000 by now. [SK272320 Harbin Heilongjiang Provincial Service in Mandarin 2200 GMT 24 Sep 80 SK]

MILLET IMPORTANCE--Millet is an important grain crop in Heilongjiang. It is a crop which is used for both army provisions and as grain stockpiled for civilian use in case of war. The area planted to this crop is very large accounting for more than 18 percent of the total grain crop area. The yield and total output of millet directly affect the total output from Heilongjiang's grain crops. [Harbin HEILONGJIANG NONGYE KEXUE (Heilongjiang Agriculture Sciences) No 1, 10 Jan 80 p 40]

CSO: 4007

HENAN

BRIEFS

SEED STRAINS--Zhengzhou, 29 Sep (XINHUA)--Seed companies have been set up in all counties in Henan and seed production and processing have gradually been specialized and mechanized in the province. Over the past 2 years, the county and municipal seed companies in Henan have produced over 300 million jin of fine seed strains of wheat, corn, cotton, peanut and sesame. At present fine wheat strains have been sown in 94 percent of Henan's wheat acreage and fine corn strains in 89 percent of the province's corn acreage. This year Henan has planted 9 million mu of cotton.
[OW291253 Beijing XINHUA Domestic Service in Chinese 0221 GMT 29 Sep 80
OW]

CSO: 4007

HUNAN STRIVING FOR BUMPER COTTON HARVEST

Beijing RENMIN RIBAO in Chinese 27 Jul 80 p 1

[Article: "Cotton Pattern Readjusted and Production Leadership Beefed Up as Hunan Strives for Bumper Cotton Harvest This Year"]

[Text] Throughout the cotton producing areas of Hunan Province, every echelon of the party organization has taken steps to beef up leadership for cotton production and to organize the masses to do a good job of caring for the cotton fields. As of mid-July, most of the more than 2.5 million mu of cotton throughout the province was in bloom, and some carried bolls as it entered the hottest part of summer.

Following consultations with every prefecture this spring, the Hunan Provincial CCP Committee relocated the more than 300,000 mu of widely scattered cotton growing area to the Dongting Lake Plain. This, plus internal readjustments made by every prefecture, brought about an increase to 500,000 mu of the centralized cotton producing area. At the same time the province allocated 400 million jin of grain for adoption of the system of "linking cotton and grain," thereby solving the problem of grain for cotton farmers and making an approved reduction in the state procurement grain quotas for communes and brigades in cotton regions. This was closely followed by adoption by the Provincial CCP Committee and CCP committees at every level of the following several measures to strengthen leadership of production of cotton.

First, they adopted economic methods to manage production and to arouse the enthusiasm of cotton farmers. This year contracting for work down to the operating team linked with a system of responsibility for calculating remuneration for output was instituted in 30 percent of the cottonfields throughout the province. Sixty percent of the cottonfields instituted contracting for work down to the household and individual level, linking it with a system of responsibility for remuneration for output. This effectively overcame egalitarianism in the calculation of remuneration for labor, and aroused the enthusiasm of the cotton farmers to strive for a bumper cotton harvest.

Next, they gave strict attention to the training of cotton technicians in view of the weakness in technical forces in the new cotton regions following readjustment of the pattern of cotton cultivation.

Leadership cadres also penetrated into cotton growing areas to help solve new situations and new problems arising in cotton production.

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CSO: 4007

EXPERIENCES OF PRODUCTION BRIGADES COMPARED, STUDIED

Beijing RENMIN RIBAO in Chinese 28 Jul 80 p 2

[Text] Editor's Note: The method of comparative survey is a good way of understanding the actual conditions in depth. It is worthy of promoting

When there is comparison there may be discrimination. This is a principle we all understand well. When a poor brigade is studied to find out why it is poor, and when the condition of that poor brigade is analyzed, experience may undoubtedly be gained. When this brigade is compared with a poor brigade and a rich brigade with basically the same conditions, the superiority of the rich brigade may be more easily observed, while the shortcomings of the poor brigade may be treated with the needed measures. The poor brigade may be helped to absorb the experience of the rich brigade, to avoid the shortcomings and develop the advantages so as to turn poverty into riches. The study of Jianhu County to compare the conditions of 20 brigades produced several items of experience. This study is significant as a reference.

The level of distribution of rural commune members of Jianhu County, Jiangsu Province, reached an average of 120 yuan per person. The average net income per person of 64 production brigades exceeded 200 yuan, but there were still 220 production brigades of which the net income per person was under 80 yuan, and 27 brigades of which the net income per person was less than 60 yuan.

Why is it that the incomes of the rich brigades and the poor brigades had that great a difference? What can be done to help the poor brigades become wealthy quickly? The county selected 2 brigades from each of the 10 communes that have basically the same conditions but different income levels to carry out a comparative study. All 20 production brigades being studied cultivate primarily grains. On the average, each workers plants 3 to 4 mu of fields. In the past, the production and distribution levels were all relatively low.

The speed of development in the last several years has been very different, however, The conditions of these brigades in 1979 are compared as follows:

The grain yield of the better brigades averaged 1,500 jin per mu, cotton yield was 149 jin, and each worker's average production was 5,800 jin of grains. In the poor brigades, the grain yield was 1,200 jin per mu, cotton 88 jin, and the production of each worker averaged 3,700 jin of grains, amounting to 64 percent that of a worker in the richer brigades. The net income from the better brigades was 77,000 yuan, averaging 37 yuan per person; that of the poorer brigades was 16,000 yuan, averaging only 9 yuan per person, and amounting to only one-fourth that of the richer brigades. The production expenditure of the richer brigades amounted to 32 percent of total income, that of the poorer brigades 51 percent. The distributed income of the richer brigades was 198 yuan per person on the average, and that of the poorer brigades was only 68 yuan.

The reason for this condition was the fact that the richer and the poorer brigades did not work the same way.

(1) The understanding and implementation of the policy of pursuing grains as the mainstay and aiming at total development are different. The Tangdun Brigade of Xinzhuang Commune insisted upon growing grains and cotton and trying to earn money at the same time; gradually nine auxiliary industries were started. The average distributed income per person for 1979 was 207 yuan. The Yaojin Brigade of Qingfeng Commune looked upon auxiliary industry as a bother and thought "if a family has two careers, one has to be neglected"; therefore, the brigade grew only grains. After the leaders urged the members repeatedly, they began to raise 4 sows and 80 ducks in 1979. At the distribution time, even when the agricultural tax was exempted, the average income per person was only 51 yuan. The brigade owed the state 13,000 yuan. Now the cadres of the brigade began to see "if a family has many careers, it will be financially prosperous."

(2) The principle of rewards according to the work is not enforced the same way. The better brigades had insisted upon quantitative management. The work was evaluated and points recorded. Some of these also practiced a fixed awards and penalties system of responsibility with regard to cotton and auxiliary production.

(3) The economic accounting work is not carried out the same way. Whenever the Xinmin Brigade of Jinhua Commune planned to start an auxiliary industry, the needs of the state and the market conditions were studied first, before calculating the income and the cost. The project was launched only if it was known to be feasible. It must earn a profit and it must not lose money. The Yunhe Fifth Brigade of Gangdong Commune did not think about economic benefits. They did not have a standard for feeding the pigs. Their income from raising pigs was very little.

(4) The condition of the leadership was not the same. In relatively better brigades, the leaders are relatively united and stable. The cadres conduct the business fairly, and are positive and willing to work. They have rich experience and know how and what to think.

After investigation and comparison, Jianhu County understood the disease of the poor brigades and began to prescribe the right drugs. The poor brigades were helped to adjust their leadership staff and their production policy. The policy of distribution according to labor is implemented and various systems of responsibility established. Their economic accounting was improved, and at the same time related departments are organized to provide the necessary support in materials, finances, and techniques.

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CSO: 4007

BRIEFS

RAPE SEEDLING CULTIVATION--As of 18 September, Jiangsu had grown rape seedlings on 500,000 mu, an increase by 190,000 mu over the corresponding period of last year. [Nanjing Jiangsu Provincial Service in Mandarin 1100 GMT 20 Sep 80 OW]

COLD SPELL--Jiangsu Province this year had a cold spring and a cool summer and even in mid-September, temperatures remained below 20 degrees centigrade. This affects the growth of late rice throughout the province. Provincial departments concerned have called on all localities to take appropriate measures to protect late rice particularly during the current heading and flowering period. [Nanjing Jiangsu Provincial Service in Mandarin 2300 GMT 22 Sep 80 OW]

AGRICULTURAL ZONING--Nanjing, 23 Sep--Jiangsu has made new progress in natural agricultural resources investigation and agricultural zoning. The first draft of the "Consolidated Report on Jiangsu's Agricultural Zoning" has recently been completed, thereby providing a scientific basis for formulating long-term agricultural production plans and serving as a guide for current agricultural production. It has also offered many rational suggestions in agricultural production and answered many new problems in agricultural development. [Beijing XINHUA Domestic Service in Chinese 0234 GMT 23 Sep 80 OW]

CSO: 4007

LIAONING

BRIEFS

AUTUMN DISTRIBUTION--The Jianping County CCP Committee, Liaoning Province, decided to make good on its autumn distribution promises despite crop failures. Due to crop failures resulting from natural disasters, farm output dropped significantly this year. However, in order to win over the peasants' confidence in party's policies and make due arrangements for commune members' livelihood, Jianping County decided to increase the amount of the income to be shared among commune members so they can receive more income. [SK021135 Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 29 Sep 80 SK]

HAILSTORMS--Hailstorms hit the eastern part of Fu County, Liaoning Province, on the afternoon of 27 September. More than 600 production teams and 130,000 mu of crops were affected. Sorghum, soybeans and vegetables were seriously affected. [SK021135 Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 29 Sep 80 SK]

CSO: 4007

QINGHAI

BRIEFS

GRAIN PROCUREMENT--Now is the time for communes and brigades throughout Qinghai Province to hand over purchasing grain to the state. The grain storage section of the provincial grain office called on various grass-roots grain stations to carefully examine the quality of grain and rationally grade it according to its quality while putting it in storage. It is not permitted to presumptuously upgrade or downgrade the grain and raise or reduce grain prices. [Xining Qinghai Provincial Service in Mandarin 2330 GMT 24 Sep 80 SK]

CSO: 4007

COMMUNE MEMBERS GIVEN WASTELAND FOR CULTIVATION

Jinan DAZHONG RIBAO in Chinese 18 Jul 80 p 1

[Article by Ban Gongsì [3803 1362 2448] and Li Zunli [2621 6690 4539]:
 "'Three Wastelands' Presented as a Treasure in Policy Implementation;
 Liaocheng Prefecture Apportions 500,000 Mu of Sandy and Saline Wasteland
 and Wasteland in Rural Villages to Commune Members for Cultivation"]

[Text] Every county in Liaocheng Prefecture has conscientiously implemented policies in support of production team apportionment to commune members of "three wastelands" for reclamation and cultivation. The total amount of "three wastelands" throughout the prefecture that is being reclaimed and put to use amounts to 507,000 mu. After being carefully tended by commune members, the growth shown by various crops on these lands is heartening.

In quite a few places in this prefecture, particularly in some less advanced communes and brigades, there is a lot of sandy, alkaline, and village wastelands, which have for many years laid uncultivated and providing no crops. This year, the Liaocheng Prefectural CCP Committee diligently summarized the experiences of some communes and brigades following the Third Plenary Session of the 11th Party Central Committee in giving "three wastelands" to commune members for cultivation, and recognized that this was a major measure for hastening agricultural development throughout the prefecture as well as a good deed that benefited the state, the people, and the collective. They thereupon studied and decided on distribution in an organized and planned way of the "three wastelands" to commune members for cultivation. In order to understand this issue, each county sent out a group of cadres to go down into the production teams with the special purpose of taking in hand the implementation of this work. The amount of "three wastelands" currently being reclaimed and put to use amounts to 76 percent of the total area of "three wastelands" in the prefecture, or the equivalent of 10 percent of the collective grain field area of the whole prefecture.

The methods used to administer the "three wastelands" are as follows:
 One is low prescribed production with an award to the tiller of all

production in excess of the amount prescribed. A second is low prescribed production, with apportionment to the tiller of a proportion of the amount in excess of that prescribed. Third is collective recording of output with earnings reverting to commune members. Fourth is farming done by commune members with the collective purchasing the output at a price and the cash income going to itself. Fifth is a system of income going to the tiller in which all income from output goes to commune members. Sixth is collective unified planting of trees to create forests which are apportioned to commune members to be cared for with teams and households sharing.

In order to allay apprehensions on the part of commune members that the "three wastelands" being cultivated might be taken back, resulting in an unwillingness to put work or fertilizer into it, some communes and brigades concluded concrete agreements guaranteeing no change for periods of 3 years, 5 years, or longer, so that the commune members need not worry.

9432

CSO: 4007

PRODUCTION RESUMED IN 14 FERTILIZER PLANTS

Jinan DAZHONG RIBAO in Chinese 17 Aug 80 p 1

[Article: "Fourteen Nitrogenous Fertilizer Plants in Shandong Province Resume Production After Success in Reducing Consumption, Making Up Deficits & Increasing Surpluses Following Stoppage of Production for Restructuring"]

[Excerpts] Last November, following joint notification by the Shandong Economic Committee and five departments, 21 small nitrogenous fertilizer plants with high consumption and large losses halted production for restructuring. After more than half a year, 14 of the plants had resumed production one after another as of 15 August following checking and acceptance. It appears on the basis of the situation during the several months since resumption of production that they have substantially reversed their former backward conditions of high consumption and large losses. As compared with the same period last year, synthetic ammonia production increased by 37 percent. Consumption of coal per ton of ammonia produced declined by 27 percent, electric power consumption declined by 19 percent, and losses were reduced by 2.93 million yuan.

Three of the plants showed profits without any subsidization at all; seven showed profits with subsidization, and three had loss figures that were 59.1 percent lower than for the same period last year. At the Jining County Chemical Fertilizer Plant where results of restructuring were best, cost of production of each ton of synthetic ammonia declined from 874 yuan prior to restructuring to 458 yuan.

At the Weishan Chemical Fertilizer Plant, prior to restructuring, discipline was lax, operations were in disarray, and accidents resulting from negligence were numerous, so much so that average monthly losses last year amounted to 100,000 yuan. Following a halt to production and restructuring, they intensified education in discipline, and perfected various rules and regulations so that production rapidly made a turn for the better. As consumption of coal and electricity decreased, costs per ton of chemical fertilizer produced fell by 181 yuan over what they had been prior to restructuring. Between March and June of this year, profits for the entire plant amounted to 290,000 yuan.

BETTER MANAGEMENT OF TRACTOR STATIONS URGED

Conference Studies Problem

Jinan DAZHONG RIBAO in Chinese 26 Aug 80 p 1

[Article: "Strive for Good Management of Commune Tractor Stations. Province-wide Commune Operated Tractor Station Administration and Management Work Conference Stresses Making the Most of Special Advantages, Liberalization of Policies, and Increased Economic Benefits"]

[Text] How can commune operated tractor stations best be managed to promote the growth of commune operated collective farm machinery enterprises? This is a management question for commune operated tractor stations that is currently in urgent need of solution. The Province-wide Commune Operated Tractor Station Administration and Management Work Conference held from 19 to 22 August in Ye County undertook a conscientious study of this problem, proposing that agriculture be paramount, that avenues be broadened, that special advantages be put to use, that policies should be liberalized, and that efforts be made to increase economic benefits.

Delegates have reported that in recent years, as a result of the large increase in tractors in brigades and production teams, and as a result of the large increase in tractors in brigades and production teams, and as a result of the development of transportation vehicles and the institution of systems of responsibility for production of various kinds in rural villages, a decline has taken place in the volume of operations of commune operated tractor stations; costs have risen; and losses have increased. Unless these problems are solved promptly, the progress of modernized construction of agriculture will be impaired. Therefore, the conference used the classical briefings on experiences and forum discussions to study some effective measures for good management of commune operated tractor stations.

The conference felt that the principle of tractor stations for agricultural use should be paramount, but that there should be a gradual increase in the scope of operations and an active marching toward the mechanization of agriculture, forestry, livestock raising, sideline occupations, and

fisheries. If tractors were to be confined to operations in croplands, they would become "idle half the year," whereas were they to be put into service for industrial sideline occupations and numerous other activities of communes and production brigades, the quantity of their operations would increase scores of times, and earnings might also increase remarkably. It is necessary, therefore, to devote attention to the development and production of farm machines and tools that can be attached to tractors to make a reality of one machine with multiple hitches and one machine with multiple uses. Commune operated tractor stations have large farm-machines, and they possess certain maintenance and repair facilities and technicians, which can be used in transportation and for maintenance and repair, for the renovation and improvement of farm machines and tools, for technical training, for the supply of spare parts, and for the development of operations of various kinds. It is necessary, in addition, to liberalize government policies to permit tractor stations to actively engage in operations without violation of national policies or laws that help develop agricultural mechanization and help expand further production by business enterprises so that collective farm machinery enterprises operated by communes will be better and better run.

The conference felt that the most important matter at the present time in the operation of commune run tractor stations is a need to combine restructuring of tractor stations with close attention to the establishment and perfection of various rules and regulations, vigorous promotion of accounting for individual vehicles, and a system of "five fixeds and a single reward or punishment," so that profits or losses and the good or bad management of a tractor station will be intimately connected to the personal material welfare of employees and so that the broad masses of employees will take the initiative in offering advice and suggestions to make the commune operated tractor stations be run even better.

The conference also made arrangements on the problem of farm machinery during the period of the "three autumn jobs" [harvesting, plowing, and sowing].

Suggestions for Improvement

Jinan DAZHONG RIBAO in Chinese 26 Aug 80 p 1

[Article: "The Key Lies in Improvement of Management"]

[Text] Commune operated tractor stations are gradually becoming a mainstay in the mechanization of agriculture. Every jurisdiction should effectively strengthen management to do a good job of managing commune operated tractor stations in just the same way that other business enterprises are run.

Most of the 2,113 commune operated tractor stations throughout Shangdong Province are well run. Basically they all have a management system, outlets for production, high operating efficiency, low levels of consumption and waste, and surplus from their business. But there are some commune operated tractor stations in which management is chaotic and which have remained for a long time in a passive situation of losses. Some have not even been able to pay wages to their employees, and some individual stations have closed their doors, locked up their vehicles, and have ceased operations. Such situations require adoption of effective measures to find real solutions to the problems. Active management of these commune operated tractor stations can make these mainstays of agricultural mechanization develop steadily.

Looked at in terms of the experience of well run commune operated tractor stations, the selection of management enterprises well versed in farm machinery is extremely important. One of the main reasons that some places have had losses for a long period of time is that greenhorns are running the stations. They lack dedication in the management of farm machines and their drive also leaves something to be desired, so some of the problems existing in the tractor stations have not been amenable to solution for a long time. Therefore, in the restructuring of commune operated tractor stations, we must certainly face the facts and select for positions of leadership those persons who understand technology and are able to manage in order to solve effectively the leadership group problem. If this is done, a good job of running the tractor stations can be assured.

Commune operated tractor stations should institute independent management, independent accounting, and a gradual expansion in the autonomy of the enterprise. Right now the autonomy accorded some commune operated tractor stations is too little. Manpower and financial and material resources must all come under the direction of the commune. In some cases, even vehicles and funds belonging to tractor stations are transferred at will in an egalitarian and indiscriminate way, thereby seriously dampening the enthusiasm of the workers. This is also the principal reason for losses by commune operated tractor stations. In this regard, the commune leaders must take the lead in carrying out the stipulated requirements of higher authority relating to good management of commune enterprises, and they should be given a reasonable amount of autonomy to do so. For example, tractor stations should be permitted authority to arrange their own farmland operations and various enterprises on the basis of the state of their own manpower, financial, and material resources; they should have authority over the selective recruitment of workers and the institution of rewards and punishments; they should have authority to use profits to expand further production by enterprises and to improve the living conditions of employees; and they should have authority to resist egalitarian and indiscriminate transfers, so as to arouse the enthusiasm and creativity of the employees.

Commune operated tractor stations should establish and perfect rules and regulations of various kinds and adopt necessary measures for economic rewards and punishments. It must be realized that quite a few tractor stations are still "eating out of a common pot" as far as management is concerned, making impossible the realization of "the more the work the greater the gain." The best way to resolve such tendencies toward egalitarianism is to promote a system of accounting for each vehicle and the "five fixeds and single reward or punishment" system of responsibility, so that employees can gain greater real benefits from the good operation of tractor stations. Wherever this has been done, outstanding economic benefits have been reaped. Tractor station cadres should make the difficult effort of learning management, and strive to do management work in a meticulous yet flexible way in order to create the conditions for the realization in their enterprises of high efficiency, low consumption, increased income, and surplus profits.

9432

CSO: 4007

BRIEFS

HYBRID TOBACCO PLANTS--Jinan, 28 Sep (XINHUA)--Scientists in east China have successfully bred hybrid tobacco plants this year by fusing the protoplasts of leaf cells of two varieties of tobacco. This is the first such successful experiment in China. Since it is difficult to cross two distantly related crop varieties or species by the conventional methods of pollination, scientists hope to achieve this by somatic hybridization, i.e., by cell fusion. Scientists of the Tobacco Research Institute in Shandong Province isolated protoplasts from the leave cells of two distantly related varieties of tobacco and then made them fuse with the aid of an agent. After a month's culture, the fusion bodies divided and grew into calluses and the scientists developed plants from them. Now the hybrid plants have grown to between 1 meter and 1.5 meters high in the greenhouse of the institute. Some of them have blossomed and born seeds. [Text] [Beijing XINHUA in English 0718 GMT 28 Sep 80 OW]

CSO: 4020

COMMENTATOR'S ARTICLE ON AUTUMN HARVEST

Chengdu SICHUAN RIBAO in Chinese 26 Jul 80 p 1

[Article by Commentator: "Strive For a Big Bumper Autumn Harvest"]

[Text] Sichuan's major spring-sown crops are now growing well; the area planted to fine varieties of crops of all kinds has been enlarged; and the quality of farming has also improved. In the case of intermediate rice, where the potential for increased output is very great, the area planted has been especially enlarged by more than 1 million mu over last year, and this is extremely helpful in realizing a bumper autumn harvest this year. However, as a result of a shrinking of the area planted to wheat, output of minor spring-sown crops throughout the province this year has not fulfilled plan. Consequently, getting increased yields from major spring-sown grain crops is a more strenuous and more arduous task. Furthermore, except for edible oil, increased output from economic crops will also depend primarily on major spring-sown crops for fulfillment of quotas. Major spring-sown crops will decide whether or not plans for increased yields in agriculture will materialize this year. As far as major spring-sown crops themselves are concerned, in many prefectures the planting season for major spring-sown crops was delayed as a result of the weather, and natural calamities occurred in some prefectures. Further natural disasters may yet occur in some prefectures. This requires that we maintain a high degree of vigilance, and under no circumstances slacken efforts, lower our guard, or become blindly optimistic. Instead we should fully realize the arduous nature of the work, be adept at using favorable conditions, overcome unfavorable factors, pay strict attention from now until the autumn harvest is in, go all out in mobilizing the masses, take more action, and use every manner of means to get a large bumper autumn harvest and guarantee fulfillment of increased output quotas in agriculture for the entire year.

Fulllest use must be made of the intervening time between harvest of the spring-sown crops and the sowing of minor spring-sown crops, adapting methods to local conditions to rush plant late autumn crops so as to increase, to the maximum extent possible, output of grain, tubers, and

vegetables. Planting of late autumn crops is an important method of increasing output that takes advantage of the special natural advantage of Sichuan Province. Every jurisdiction should be prompt in arousing the masses to adapt methods to local conditions in fulfillment of late autumn crop planting plans, to make effective arrangements for the planting of seedlings and application of fertilizer, and for keeping pace with the seasons to do a good job of planting and a good job of care.

9432

CSO: 4007

AGRICULTURAL RAW MATERIAL BASES STRENGTHENED IN SICHUAN

Beijing RENMIN RIBAO in Chinese 12 Aug 80 p 2

[Article by correspondent Li Shaoyi [2621 4801 0122]: "Sichuan Intensifies Building of Agricultural Raw Materials Bases; Puts Development of Light Industry on Sound Foundation"]

[Text] Light industrial units in Sichuan Province have bent great efforts to intensify the building of agricultural raw materials bases, closely linking raw materials production with processing, to put intensive light industry development on a sound footing.

Currently, light industries in Sichuan Province that are dependent on the products of agricultural sideline industries have built and enlarged a group of raw materials bases and centralized supply areas for raw materials to form a rudimentary raw materials supply system. Twenty-six mechanized sugar refineries form a processing center for the system. Included are the 800,000 mu cane sugar materials bases in the four large cane prefectures of Neijiang, Yibin, Jiangjin, and Leshan. Eight major export canning plants also form a processing center comprising canned goods raw materials bases for a total of 10 kinds of vegetables and fruits. In addition, there are 13 lue-cured tobacco raw materials base counties of the cigarette industry plus bamboo, wood, palm, rattan, straw, and perfume industrial raw materials bases for the manufacture of paper and daily necessities.

In Sichuan today, products using agricultural raw materials in their manufacture account for a very large proportion of the total products of light industry. The total output value and profits and revenues turned over to the state by the four major light industries, sugar refining, canning, cigarette making, and paper making amounted to 52 and 70 percent respectively of that provided by light industry throughout the province. In order to increase light industry with all possible speed, Sichuan Province has made the establishment of agricultural materials bases a major instrument for the development of light industry.

Light industrial units in Sichuan Province are making fullest use of resources in the province. They are selectively choosing key industries for the development of raw materials production so that the raw materials production of these industries will be geared to processing and be mutually reinforcing in making the most of their own special advantages. From 1977 until the present, the sugar refining industry in this province has given special attention to sugarcane production. While consolidating development of old cane areas, they have actively built new cane areas. Large-scale increases in sugarcane have taken place throughout the province year after year for the past 3 years, and sugar production has increased an average 54 percent each year. Faced with a new situation in which the "can't get enough" of the past has given way to "too much to handle" in the sugar refining industry, light industrial units in Sichuan Province began last year to give serious attention to new increases in sugar refining capacity. In nine refineries they instituted technical improvements to increase their daily sugarcane pressing capacity to 3,000 tons, which increased the production of white sugar by 30,000 tons in a single pressing season. Output value amounted to 33.6 million yuan, and accumulations increased by more than 13 million yuan.

In their intensification of construction of agricultural raw materials bases, light industrial units in Sichuan Province have taken a practical approach adapting methods to local circumstances, the season, and the varieties of raw materials, and adopting diverse methods. The principal of these have been: 1) comprehensive planning for key raw materials bases and raw materials areas under the guidance of the state plan; 2) in the case of agricultural sideline industry raw materials that are large in quantity but scattered, as for example bamboo, rain cape straw, and rice and wheat straw, designation of plants according to their location so as to link production and marketing in accordance with circulation channels in the economy, and organizing the production and supply of raw materials; 3) linking industry and agriculture with plants and communes to study and formulate plans jointly, with both sides signing contracts for the development of raw materials production in accordance with the needs of industry for kinds, quantity, quality, and time of entry into the plant of raw materials. Results have been particularly outstanding in the case of light industries where seasonality is strong, processing time pressing, and where organization of balanced production is necessary.

Intensification of the construction of raw materials bases for light industry and the development of raw materials production depends principally on government policies. In organizing the production and supply of agricultural raw materials, Sichuan Province has diligently implemented the party's various economic policies for rural villages, with particularly strict implementation of policies pertaining to grain, prices, award sales, and returns pertaining to the development and state procurement of the various kinds of economic crops and agricultural sideline products. Every light

industry has concurrently vigorously strengthened technical guidance and material support to agricultural raw materials bases, has helped communes and brigades train a corps of scientists and technicians, and has instituted scientific farming. Industrial units engaged in canning and sugar refining have released a certain proportion of their own total expenditures for raw materials for use as expenditures for the technical improvement of raw materials.

9432

CSO: 4007

SYSTEM OF AGRICULTURAL RESEARCH CONTRACTS PROMOTED

Chengdu SICHUAN RIBAO in Chinese 1 Aug 80 p 2

[Text] The Xichong County Science Committee earnestly promoted the system of scientific research contracts to clarify the responsibility and to be fair in awards and penalties. The departments requesting research items and units accepting the projects are urged to proceed according to contracts seriously, and the results have been good.

In the past, the items of agricultural research of Xichong County were handed down by the county science committee to the production brigade to be carried out. Both sides had no clear understanding regarding the economic and technical responsibilities. There was no compensation for scientific research expenditure. Whether the research studies were well done or not very well done, it was all the same. It often happened that money was spent but the job was not done. For the purpose of changing this situation, the county science committee decided to carry out the contract system for 6 of the 10 research items which the province, the district, and the county have ordered this year. In early May, those in charge at the county science committee led technical personnel to the units that are to take on the key projects to carry out repeated negotiations, to agree upon the concrete contents of research contracts and to determine the method of awards and penalties. The contracts stipulate the technical details of the project, the needed research expenditure, the technicians to participate in the experiments, and the time to complete the research project. A compensation system for the research expenditure is practiced. If the project is completed as planned, the payment for the expenditure does not have to be refunded and may be used as an award. If only 70 to 90 percent of the project is completed, 40 to 20 percent of the payment is to be refunded, respectively. If the research is not carried out according to specifications, or if the experiment fails due to human error, 60 to 80 percent of the payment is to be refunded according to the condition as a penalty. During the process of the experiment, inspections and evaluations are to be carried out at various key technical segments, and prizes are to be awarded to those who carry out the plan well. The contract also stipulates that the project implementation design is to be proposed by the county science committee, which is also responsible for technical training, timely dispensation of funds, and

assistance in resolving some concrete problems. If the research project fails as a result of failure to carry out the contract on the part of the committee, it would be the responsibility of the committee. The contract is signed under the supervision of the local party committee which is to enforce compliance from both sides. After the contract is signed, the research department and the unit that takes on the project are both controlled by the contract and must conscientiously carry out the terms of the contract. In the middle of May, the county science committee signed contracts with the 3 production teams of the 1st, and 2nd, and the 13th of the 1st brigade of Qingshi Commune to carry out "doubling the output target" yield per mu of hybrid rice in 100 mu of fields. Soon after the contracts were signed, technicians were sent to the production teams to provide technical guidance in such key links as seedling culture in greenhouses, seedling tillering, and transplanting in fields, etc. These three production teams also carried out the technical design strictly according to the contracts to practice the new technique of cultivating seedlings in two stages to grow strong tillers. Timely early planting was also carried out to grow a sufficient number of basic seedlings. A few days after transplanting was finished, the county science committee organized related communes and brigades to go to every one of the experimental fields to inspect, evaluate, and compare. An award of 40 yuan was handed out to the unit and the individual who carried out the plan well.

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DEVELOPMENT OF ECONOMIC FORESTS URGED

Chengdu SICHUAN RIBAO in Chinese 14 Jul 80 p 2

[Article by Xie Zijun [6200 5261 0971]: "Make the Most of Special Natural Advantages; Strive to Develop Economic Forests—A Major Way To Change the Face of the Rural Economy in Mountain Regions and Hills"]

[Excerpts] Sichuan Province has extremely abundant economic forest resources with tree varieties numbering several hundred. In 1979, output value of production was almost 1 billion yuan. In output of silkworm mulberry, tung insect wax, and citrus, it stands first in the country, and in output of Chinese tallow, it stands second.

However, development of economic forests in Sichuan Province, like development of the entire forestry industry, is a notoriously weak link in the present economic structure of agriculture. Adverse effects in terms of the national plan and the livelihood of the people is quite great. In terms of the large number of forestry by-products that are famous in both domestic and foreign markets, except for silkworm mulberry, tea leaves, and citrus for which an increase in output has occurred, most other products have not revived annual output to the highest levels ever recorded, and the extent of decline of some has been very great. Tung trees, for example, have been the woody plant source of industrial oil that is a specialty of China where they have been grown for more than 1000 years. Tung nuts have a oil content from between 65 and 70 percent, and tung oil has the special properties of quick drying, glossiness, non-conductivity of electricity, resistance to cold and heat, resistance to dampness, and protection against decomposition and rust. There are 2000 articles produced by modern industry in which tung oil is a raw material. China exports 80 percent of the tung oil in the international marketplace, and Sichuan Province is the major tung producing region of China with an output of 40 percent of the national total. However, economic forests that occupy such a major position in the national economy have suffered a large amount of damage. In 1979, total output of tung seed for all of Sichuan was 2.67 million dan, but output in 1955, which was the highest year of record, amounted to more than 4.28 million dan. In 1979, total value of state purchases of

agricultural sideline products in Sichuan Province showed an increase of almost 30 percent over 1978. In the 3 years following the smashing of the "gang of four," the net increase in total value of agricultural by-products purchased by the state in Sichuan Province was greater even than the increase in total value during the 20 years from 1956 to 1976. Nevertheless, despite such large increased output and development of agriculture, the quantity of purchases of large numbers of economic forest products continued lower than during the highest years recorded. In a comparison of 1979 quantity of purchases with the highest recorded levels, tung declined 37 percent; Chinese insect wax declined 27 percent; raw lacquer declined 28.3 percent; southern bamboo declined 33 percent; coir fiber declined 46 percent; wood fungus declined 79.6 percent; output of tea oil declined 27.7 percent, and output of rosin declined 33.8 percent.

There were numerous reasons for the great decline in economic forest products. One was that during a 3 year period of difficulties, a large number of the economic forest resources were cut down, and they continue to suffer destruction throughout the period of the Great Cultural Revolution. Another reason was impairment caused by the mentality of a single product economy, which caused destruction of forests to grow grain and squeezed out forest resources. A third reason was the suspension, for a time, of the policy of award sales plus a lowering of purchases prices, and a lack of funds needed for the development and support of production, which dampened the enthusiasm of the masses. A fourth reason was a shortage of technical cadres so that research work became a weaker link. These circumstances revealed the weakness of the economic structure of Sichuan's agriculture. Proportional imbalance in the economic structure of agriculture has become a serious impediment to the further development of the rural economies of Sichuan Province. Without serious attention to the development of economic forests, fullest utilization of the abundant natural resources is not possible, and poor mountains cannot be transformed into precious mountains. This is the major reason that the countenance of rural village economies in the mountain regions and hills of Sichuan Province cannot be rapidly transformed. A shortage of economic forest products also seriously impairs the supply of industrial raw materials, exports and foreign trade, market supply and things the people need in their daily lives. One example is the famous wood fungus from Sichuan, which is both of use in protecting the health of those who work in a dust environment [7089 1057 0525 0202] and a tasty ingredient in fish and meat dishes, but which was unavailable in markets for a long time as a result of a decline in output of nearly 80 percent. Rosin is an important raw material in the manufacture of paper and soap, and Sichuan Province requires about 8000 tons of it annually, but annual output is now only 2000 or 3000 tons, and we must depend on other provinces for it. As a result, there has been a shortage of paper and soap for a long time.

The reason we so vigorously emphasize development of economic forests is not just because this is a glaringly weak link in the current agricultural

economy of Sichuan Province, which problem should be properly solved during the process of readjustment, but because in the development of economic forests in our province, which has remarkable natural advantages, our coming to real grips with this problem in the course of readjustments to the internal structure of agriculture, can play a major role and open vast vistas in enlivening the agricultural economy and fully developing agricultural production.

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XINJIANG

BRIEFS

AGRICULTURAL NEWS--Urumqi, 26 Sep (XINHUA)--Xinjiang Uygur Autonomous Region in northwest China has had another good harvest of oil-bearing crops this year. The total yield was 142,500 tons, an increase of 1,250 tons over last year. Xinjiang has developed a new breed of cattle both for milk and meat by crossbreeding a local breed with an imported one. The crossbred cattle are adapted to high mountain pastures and can weather bitter winter cold. Such cattle now number 20,000 head. Xinjiang, one of the major pastoral areas in China, has added 400,000 hectares for growing forage. In addition, it has built projects to irrigate 160,000 hectares of grassland and improved another 120,000 hectares. [Text] (OW29135) Beijing XINHUA in English 0815 GMT 26 Sep 80 OW]

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ZHEJIANG

BRIEFS

COCOON PURCHASE--Zhejiang Province has purchased approximately 758,000 dan of summer cocoons, an increase of more than 100,000 dan over the corresponding period of 1979. Establishment of specialized teams and timely introduction of scientific methods raised the output of silk-worm cocoons and mulberry leaves. [OW291235 Hangzhou Zhejiang Provincial Service in Mandarin 1100 GMT 25 Sep 80 OW]

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